

# container handling method

## Collecting and handling methods of samples

### Blood

[Timing of blood sampling] Ideally, blood samples are collected when well-rested and after fasting in the early morning (except for emergency situations or specified conditions).

#### [Collecting samples]

- Blood: After taking blood, promptly transfer to a specified tube containing the anticoagulant, and gently invert the tube. Unless otherwise specified, specimens to be stored at room temperature or under refrigeration should be kept in the original tubes, and those to be stored frozen should be transferred to submission containers. Submit the specimens under the specified storage conditions.
- Serum: Collect about 3 times the volume of blood needed for the test. Unless otherwise specified, allow to stand at room temperature. After coagulation, centrifuge the blood. After centrifugation, transfer the supernatant to a submission container. Submit the specimens under the specified storage conditions. The storage condition depends on the tests, so please check it for each test.
- Plasma: Collect about 3 times the volume of blood needed for the test. Unless otherwise specified, after drawing blood into a specified tube containing the anticoagulant, promptly invert the tube, and centrifuge the blood. After centrifugation, transfer the supernatant to a submission container. Submit the specimens under the specified storage conditions. Sampling methods and storage conditions depend on the tests, so please check comments, storage conditions, and handling methods of containers for each test. If the volume of the collected blood is less than the volume defined in the container, it may give influence on the data of some items. Make sure to collect the specified volume of blood.

#### [Points to note]

- Blood sampling into vacuum tubes  
If collected blood volume is below the specified volume of the tube, the pressure inside the tube remains negative, which may cause hemolysis. Make sure to collect the specified volume of blood.
- Blood sampling into syringes  
Take off the needle from the syringe, and slowly inject the needle. Draw blood along the side of the tube.
- Preventive measures against hemolysis  
Avoid putting excess pressure or foaming of blood when drawing blood. Use a completely dried blood sampling tube.  
Avoid physical stimulation (e.g., extremely high or low temperature, vibration, etc.).

### Urine

#### [Random urine]

Collect urine into a urine sampling container, and transfer the necessary volume of urine into a submission container. Submit the specimen under the specified storage conditions.

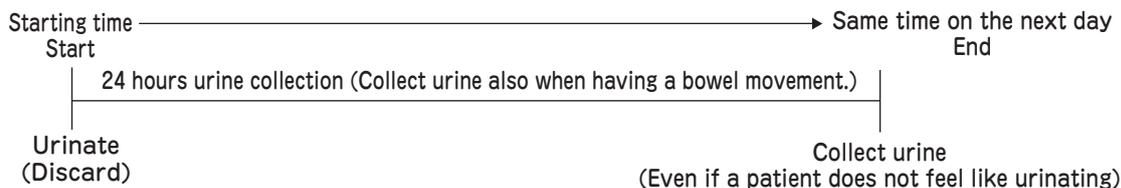
Some tests specify the timing of urine sampling; therefore, please check the comments and handling methods of dedicated containers for each test.

#### [24 hours urine collection]

At the starting time point of urine collection, instruct a patient to urinate completely (that should be flushed). Then, collect all urine in a storage container in the following 24 hours period. During the time of urine collection, the storage container should be covered by a lid and kept in a cold and dark place.

After the urine collection, measure the urine volume, mix well, and transfer the necessary volume of the specimen into a submission container. Write the collection time period and urine volume, and submit the specimen under the specified storage conditions.

- Acidified urine collection  
Depending on the tests, SRL uses following methods of acidified urine collection to preserve and stabilize specimens. For some tests, acidified urine may have an effect on the data; therefore, please make sure to check comments for each test.
  1. Using preservatives  
Regardless of the urine volume, put all dedicated preservatives (the tablet and granules) into a storage container for urine collection.
  2. Using hydrochloric acid  
Put the specified amount of 6N hydrochloric acid into a storage container for urine collection. (Please check comments for the specified amount of hydrochloric acid and points to note for each test.)



## Sending in samples for coagulation test (extraction from consensus on handling of coagulation test samples)

### [Blood collection tube]

- Use the tube made of plastic or glass treated with silicon.
- Use 0.105-0.109M (3.13-3.2%) sodium citrate solution for anticoagulant.
- The ratio of sodium citrate solution to blood is 1: 9. Acceptable volume of blood collection should be nominal capacity  $\pm 10\%$ .
- For patients with hematocrit level (Ht)  $\geq 55\%$ , adjust the volume of sodium citrate solution.

### [Blood collection]

Comply with JCCLS standard blood collection guideline GP4-A3.

- Vacuum or syringe blood collection can be done.
  - Vacuum blood collection using a blood collection needle: collect first blood specimen using a coagulation test tube or blood serum collection tube.
  - Vacuum blood collection using a butterfly needle: collect first blood specimen using a dummy blood collection tube or a blood collection tube for other tests before blood collection in a tube for coagulation test.
  - Syringe blood collection: Transfer first blood specimen into a blood collection tube for coagulation test.
- Aseptic needling should be applied with minimum blood flow stagnation (use of tourniquet).
- Use 21- 23G injection needle or butterfly needle depending on individual situations.
- Don't use a venous line that contains heparin.
- Confirm that the accurate volume of blood has flown into the blood collection tube. Invert the tube immediately 5 times to mix the blood and anticoagulant without forming bubbles.

### [centrifugation]

- The temperature setting for centrifugation should be controlled to room temperature (18-25°C).
- Average centrifugal gravity of 1500 x g for at least 15 minutes or 2000 x g for at least 10 minutes is recommended for the centrifugation treatment.
- Contamination with platelet affects the measurement result. Use supernatant at least 5mm away from the buffy coat so that the remaining platelet count is less than 1000/ $\mu\text{L}$ .

### [Confirmation of coagulated samples]

Samples may be coagulated at the time of arrival in the laboratory, especially when taken from patients with difficulty of blood collection. If coagulation is confirmed before centrifuge, whether the test will be continued after re-collection of blood or discontinued will be discussed with the clinician.

### [Supplementary information]

According to the CLSI Approved guideline 5th ed H21-A5, blood collection via a vascular access device (VAD) should be done with no air leak confirmed, avoiding heparin flush wherever possible to prevent contamination or dilution with heparin.

More specifically, flush with 5mL of saline, and discard blood of 5 mL or 6-folds of VAD dead space volume before sample collection.

It is clearly stated that blood collection from saline lock (cap-off intravenous port) should be done after discarding twice the volume of dead space of catheter and the extension set.

### (Reference)

1. Coagulation test standardization working group, Standardization Committee of Japanese Society for Laboratory Hematology Consensus on handling of coagulation test samples, Journal of The Japanese Society for Laboratory Hematology 17, 149-168, 2016.
2. Ieko M et al : expert consensus regarding standardization of sample preparation for clotting time assays. Int J Hematol 112; 614-620, 2020.

## About dedicated containers

The dedicated containers presented in each page are prepared by SRL. Please contact the nearest office for the containers. Please regard the self-life as a reference.

## Split Sales

Based on the customer's instruction, we may open the package and sell the product in small packages (installment sales). In such cases, the customer shall agree to the following.

- ( i ) The manufacturer may not guarantee the quality of containers subject to installment sales within the expiration date disclosed by the manufacturer or stated in the statement of performance.
- ( ii ) Containers subject to installment sales must be used promptly after receipt.
- ( iii ) We are not legally liable for non-conformity of contract with respect to the containers sold in installments.

## Handling of labeled containers

We may affix a predetermined label to a container upon instruction from the customer. In such cases, ownership of the container to which the label is attached shall be transferred to the customer at the time the customer places an order for the container, notwithstanding anything stated in the contract or purchase order for the sale of the container.

# container handling method

## CONTAINER FORM

**A00**

Storage conditions: Room temperature

Previous container symbol

**X**



Polyethylene test tube

## CONTAINER FORM

**ARR**

Storage conditions: Room temperature

Previous container symbol

**r**



Sterile polyethylene test tube

## CONTAINER FORM

**ASS**

Storage conditions: Room temperature

Previous container symbol

**i**



Light-shielding polyethylene test tube

## CONTAINER FORM

**AZZ**

Acid-washed polyethylene test tube  
Storage conditions: Room temperature

Previous container symbol

**Z**



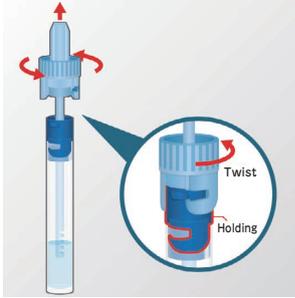
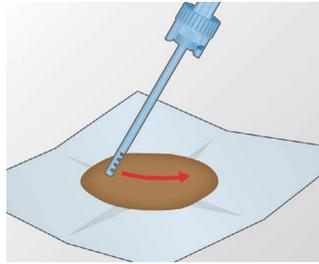
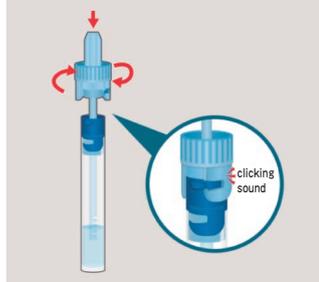
Metal test

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>F00</b> Previous container symbol</p> <p><b>U</b></p>  <p>Stool container</p> <p>Storage conditions: Room temperature</p>	Adenovirus DNA	stool 500mg			Collect 500mg of stool in the designated container, and be sure to store frozen. Avoid putting in another request at the same time. In this method, a result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples.
	Norovirus antigen	stool Little-finger head size			Place 0.5g (little-finger head size) of stool collected from center of stool into a container shown in the left image, and be sure to freeze.
	Norovirus RNA, qualitative				
	Fecal calprotectin	stool 1g			Place 1g (thumb-head size) of stool into a container shown in the left image, and be sure to freeze.
	Digestion state	stool Thumb-head size			Place 1g (thumb-head size) of stool into a container shown in the left image, and refrigerate the specimen.
	Entamoeba histolytica DNA qualification	stool 0.5g			Place 0.5g (little-finger head size) of stool collected from center of stool into a container shown in the left image, and be sure to freeze.

CONTAINER FORM	TEST NAME	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>F20</b> Previous container symbol</p> <p><b>d4</b></p> <p>Dedicated container for Fecal Helicobacter pylori antigen</p>  <p>Contents: Boric acid 1mL Storage conditions: Room temperature Shelf-life: 24 months</p>	Fecal Helicobacter pylori antigen		<ol style="list-style-type: none"> <li>(Preparation) Peel off the white label from the container halfway and write name, date, etc., then roll it up again. Turn the pink stool collection stick and pull it out.</li> <li>(Collect stool) Scrape the surface of the stool so that all the grooves on the tip of the stick are filled with stool.</li> <li>(After collecting stool) Put the stick back into the container and screw it firmly to the base. Do not open again.</li> <li>(Storage Precautions) Store in the attached plastic bag in a cool, dark place until submission. After collecting stool, please submit it as soon as possible.</li> </ol> <p>(Note) Please submit as fresh stool as possible. (Note) Do not remove or loosen the green cap of the stool collection container.</p>

# container handling method

CONTAINER FORM	TEST NAME	STORE TEMPERATURE
<p><b>F30</b> Previous container symbol <b>d9</b></p>  <p>Contents: tris buffer BSA sodium azide (≤ 0.1%)</p> <p>Storage conditions: Refrigeration</p> <p>Shelf-life: 24 months</p>	<p><b>Fecal calprotectin(FEIA)</b></p> <p><b>SAMPLE HANDLING METHOD</b></p>     <ol style="list-style-type: none"> <li>1. While holding the blue part of the cap, twist the top light blue part to the left to pull out the stick.</li> <li>2. Scrape the stool to completely fill up the 4 grooves at the tip of the stick.</li> <li>3. Remove the stool at the tip with toilet paper, etc.</li> <li>4. Put the stick into the container and twist the light blue part to the right until it fits into the blue part with a clicking sound.</li> </ol> <p>● Note Do not expose eyes, mouth or skin to the preservation solution in the container. If accidentally exposed, rinse well with water.</p>	<p><b>F</b></p>

CONTAINER FORM	TEST NAME	STORE TEMPERATURE	SAMPLING METHOD
<p><b>F80</b> Previous container symbol <b>d8</b></p>  <p>Additives: Preservation solution Storage conditions: Room temperature Shelf-life: 1 year</p>	<p><b>Hemoglobin and transferrin in feces</b></p> <p><b>Hemoglobin in feces, qualitative Gold colloid method</b></p> <p><b>Hemoglobin in feces, quantitative Gold colloid method</b></p>	<p><b>R</b></p>	<p>● Sampling methods</p> <ol style="list-style-type: none"> <li>1. Rotate the screw cap, and pull out the stick. Scrape the wide surface of the stool with the sampling probe.</li> <li>2. Place the stick back into the container (do not reinsert), and firmly tighten the screw cap.</li> <li>3. Put the container in an attached bag. Then, refrigerate and submit the specimen.</li> </ol> <p>● Points to note</p> <ol style="list-style-type: none"> <li>1. Do not throw away preservation solution in the container.</li> <li>2. Cover the grooved portion of the sampling probe completely with stool sample. Do not scrape up too much or too little stool. No food restrictions are necessary before fecal sampling.</li> </ol>

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORAGE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>H00</b> Previous container symbol</p> <p><b>H</b></p>  <p>Containing the preservation solution (Container capability of 5 mL)</p> <p>Additives: RPMI-1640 FBS Kanamycin sulfate Novo-heparin sodium Sodium bicarbonate HEPES</p> <p>Storage conditions: Freeze</p> <p>Shelf-life: Use this after confirming that the solution color has turned to pale pink. The color turns to pale yellow after freezing and to pale pink after thawing.</p>	Leukemia/lymphoma analysis (LLA), CD45 gating, test for hematopoietic malignant tumor cells	bone marrow fluid 1.0 each	bone marrow fluid (with the preservation solution) 1.0 each		Collect the specified amount of sample, mix well, and refrigerate. Please submit a sample on the day it is collected.
	Multiple myeloma analysis CD38 multianalysis, test for hematopoietic malignant tumor cells				
	Chromosome G-Banding				
	Chromosome analysis using spectral karyotyping (SKY)(Hematological disorder)	lymph node 5×5×5 mm	lymph node (with the preservation solution) 5×5×5 mm		Obtain 1.0 mL of bone marrow fluid into a container shown in the left image aseptically, mix well, and refrigerate the specimen. Please submit a sample on the day it is collected.
	TCF3-PBX1 t(1;19) translocation				
	CKS1B 1q21 amplification				
	ALK 2p23 translocation	bone marrow fluid 1.0 each	bone marrow fluid (with the preservation solution) 1.0 each	R	Place lymph nodes 5×5×5 mm in size in a container shown in the left image, suspend, and refrigerate. Please submit a sample on the day it is collected.
	GATA2-MECOM inv(3) inversion, t(3;3) translocation				
	BCL6 3q27 translocation	lymph node 5×5×5 mm	lymph node (with the preservation solution) 5×5×5 mm		Place lymph nodes 5×5×5 mm in size in a container shown in the left image, suspend, and refrigerate. Please submit a sample on the day it is collected.
	IGH-FGFR3 t(4;14) translocation	bone marrow fluid 1.0 each	bone marrow fluid (with the preservation solution) 1.0 each		Obtain 1.0 mL of bone marrow fluid into a container shown in the left image aseptically, mix well, and refrigerate the specimen. Please submit a sample on the day it is collected.
	FIP1L1-PDGFR4 4q deletion (4q12 deletion)				
	CSF1R 5q deletion				
	EGR1 5q deletion				
	PDGFRB 5q32 translocation				
	D7S486 7q deletion/Chromosome 7 monosomy				
Chromosome anomaly associated with hematological disorders, Chromosome 8					

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>H00</b> Previous container symbol</p> <p><b>H</b></p>  <p>Containing the preservation solution (Container capability of 5 mL)</p> <p>Additives: RPMI-1640 FBS Kanamycin sulfate Novo-heparin sodium Sodium bicarbonate HEPES</p> <p>Storage conditions: Freeze</p> <p>Shelf-life: Use this after confirming that the solution color has turned to pale pink. The color turns to pale yellow after freezing and to pale pink after thawing.</p>	MYC 8q24 translocation	bone marrow fluid 1.0	bone marrow fluid (with the preservation solution) 1.0		Obtain 1.0 mL of bone marrow fluid into a container shown in the left image aseptically, mix well, and refrigerate the specimen. Please submit a sample on the day it is collected.
	IGH-MYC t(8;14) translocation	lymph node 5×5×5 mm each	lymph node (with the preservation solution) 5×5×5 mm each		Place lymph nodes 5×5×5 mm in size in a container shown in the left image, suspend, and refrigerate. Please submit a sample on the day it is collected.
	RUNX1-RUNX1T1 (AML1-MTG8) t(8;21) translocation	bone marrow fluid 1.0 each	bone marrow fluid (with the preservation solution) 1.0 each		Obtain 1.0 mL of bone marrow fluid into a container shown in the left image aseptically, mix well, and refrigerate the specimen. Please submit a sample on the day it is collected.
	FGFR1 8p11.2 translocation				
	BCR-ABL1 t(9;22) translocation				
	KMT2A(MLL) 11q23.3 translocation	lymph node 5×5×5 mm	lymph node (with the preservation solution) 5×5×5 mm	R	Place lymph nodes 5×5×5 mm in size in a container shown in the left image, suspend, and refrigerate. Please submit a sample on the day it is collected.
	IGH-CCND1 (IGH-BCL1) t(11;14) translocation				
	NUP98 11p15 translocation	bone marrow fluid 1.0 each	bone marrow fluid (with the preservation solution) 1.0 each		Obtain 1.0 mL of bone marrow fluid into a container shown in the left image aseptically, mix well, and refrigerate the specimen. Please submit a sample on the day it is collected.
	BIRC3-MALT1 (API2-MALT1) t(11;18) translocation	lymph node 5×5×5 mm	lymph node (with the preservation solution) 5×5×5 mm		Place lymph nodes 5×5×5 mm in size in a container shown in the left image, suspend, and refrigerate. Please submit a sample on the day it is collected.
	ATM 11q deletion	bone marrow fluid 1.0 each	bone marrow fluid (with the preservation solution) 1.0 each		Obtain 1.0 mL of bone marrow fluid into a container shown in the left image aseptically, mix well, and refrigerate the specimen. Please submit a sample on the day it is collected.
	Chromosome anomaly associated with hematological disorders, Chromosome 12				
	ETV6-RUNX1 (TEL-AML1) t(12;21) translocation				
D13S319 13q deletion					

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORAGE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>H00</b> Previous container symbol</p> <p><b>H</b></p>  <p>Containing the preservation solution (Container capability of 5 mL)</p> <p>Additives: RPMI-1640 FBS Kanamycin sulfate Novo-heparin sodium Sodium bicarbonate HEPES</p> <p>Storage conditions: Freeze</p> <p>Shelf-life: Use this after confirming that the solution color has turned to pale pink. The color turns to pale yellow after freezing and to pale pink after thawing.</p>	<p><b>IGH-BCL2 t(14;18) translocation</b></p>	lymph node 5×5×5 mm	lymph node (with the preservation solution) 5×5×5 mm		<p>Place lymph nodes 5×5×5 mm in size in a container shown in the left image, suspend, and refrigerate. Please submit a sample on the day it is collected.</p>
	<p><b>IGH-MAF t(14;16) translocation</b></p>	bone marrow fluid 1.0 each	bone marrow fluid (with the preservation solution) 1.0 each		
	<p><b>PML-RARA t(15;17) translocation</b></p>	bone marrow fluid 1.0 each	bone marrow fluid (with the preservation solution) 1.0 each		
	<p><b>CBFB inv(16) inversion, t(16;16) translocation</b></p>				
	<p><b>TP53 17p deletion</b></p>				
	<p><b>MALT1 18q21 translocation</b></p>	lymph node 5×5×5 mm	lymph node (with the preservation solution) 5×5×5 mm		<p>Place lymph nodes 5×5×5 mm in size in a container shown in the left image, suspend, and refrigerate. Please submit a sample on the day it is collected.</p>
		bone marrow fluid 1.0 each	bone marrow fluid (with the preservation solution) 1.0 each		<p>Obtain 1.0 mL of bone marrow fluid into a container shown in the left image aseptically, mix well, and refrigerate the specimen. Please submit a sample on the day it is collected.</p>
	<p><b>BCL2 18q21 translocation</b></p>	lymph node 5×5×5 mm	lymph node (with the preservation solution) 5×5×5 mm		<p>Place lymph nodes 5×5×5 mm in size in a container shown in the left image, suspend, and refrigerate. Please submit a sample on the day it is collected.</p>
		bone marrow fluid 1.0 each		bone marrow fluid (with the preservation solution) 1.0 each	
	<p><b>20q deletion</b></p>				
	<p><b>Chromosome anomaly associated with hematological disorders, Chromosome X</b></p>				
	<p><b>Chromosome anomaly associated with hematological disorders, Chromosome Y</b></p>				
	<p><b>Sex-mismatched bone marrow transplantation (BMT) (Chromosomes XY)</b></p>				<p>Obtain 1.0 mL of bone marrow fluid into a container shown in the left image aseptically, mix well, and refrigerate the specimen. Please submit a sample on the day it is collected.</p>

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>H00</b> Previous container symbol</p> <p><b>H</b></p>  <p>Containing the preservation solution (Container capability of 5 mL)</p> <p>Additives: RPMI-1640 FBS Kanamycin sulfate Novo-heparin sodium Sodium bicarbonate HEPES</p> <p>Storage conditions: Freeze</p> <p>Shelf-life: Use this after confirming that the solution color has turned to pale pink. The color turns to pale yellow after freezing and to pale pink after thawing.</p>	<p><b>1p Deletion</b></p>	<p>tissues 5×5×5 mm for each</p>	<p>tissues (with the preservation solution) 5×5×5 mm each</p>		<p>Place tissues 5×5×5 mm in size in a container shown in the left image, suspend, and refrigerate. Please submit a sample on the day it is collected.</p>
	<p><b>MYCN 2p24 amplification</b></p>	<p>bone marrow fluid 1.0</p>	<p>bone marrow fluid (with the preservation solution) 1.0</p>		<p>Obtain 1.0 mL of bone marrow fluid into a container shown in the left image aseptically, mix well, and refrigerate the specimen. Please submit a sample on the day it is collected.</p>
	<p><b>19q Deletion</b></p>	<p>tissues 5×5×5 mm for each</p>	<p>tissues (with the preservation solution) 5×5×5 mm each</p>	<p><b>R</b></p>	<p>Place tissues 5×5×5 mm in size in a container shown in the left image, suspend, and refrigerate. Please submit a sample on the day it is collected.</p>
	<p><b>EWSR1 22q12 translocation</b></p>	<p>bone marrow fluid 1.0 each</p>	<p>bone marrow fluid (with the preservation solution) 1.0 each</p>		<p>Obtain 1.0 mL of bone marrow fluid into a container shown in the left image aseptically, mix well, and refrigerate the specimen. Please submit a sample on the day it is collected.</p>

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>H00</b> Previous container symbol</p> <p><b>H</b></p>  <p>Containing the preservation solution (Container capability of 5 mL)</p> <p>Additives: RPMI-1640 FBS Kanamycin sulfate Novo-heparin sodium Sodium bicarbonate HEPES</p> <p>Storage conditions: Freeze</p> <p>Shelf-life: Use this after confirming that the solution color has turned to pale pink. The color turns to pale yellow after freezing and to pale pink after thawing.</p>	<p><b>FLT3/ITD mutation analysis</b></p>	bone marrow fluid 1.0 each	bone marrow fluid (with the preservation solution) 1.0 each	R	Obtain 1.0 mL of bone marrow fluid into a container shown in the left image aseptically, mix well, and refrigerate the specimen. Please submit a sample on the day it is collected.
	<p><b>FLT3 mutational analysis ITD/TKD</b></p>				Obtain 1.0 mL of bone marrow fluid into a container shown in the left image, mix well, and refrigerate the specimen. Avoid putting in another request at the same time. In this method, the result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples.
	<p><b>NPM1 mutational analysis</b></p>				Collect the specified amount of sample, mix well, and refrigerate. In this method, a result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples.
	<p><b>KIT sequence analysis (leukemia)</b></p>				<p>Obtain 1.0 mL of bone marrow fluid into a container shown in the left image aseptically, mix well, and refrigerate the specimen. Please submit a sample on the day it is collected.</p>
	<p><b>Screening of chimeric genes related to leukemia, quantitative</b></p>				
	<p><b>WT1 mRNA quantitative</b></p>				
	<p><b>Major BCR-ABL1 mRNA, quantitative</b></p>				
	<p><b>Major BCR-ABL1 mRNA(%)</b></p>				
	<p><b>Major BCR-ABL1 mRNA, qualitative</b></p>				
	<p><b>Mutation analysis in the ABL1 region, Major BCR-ABL1</b></p>				
	<p><b>minor BCR-ABL1 mRNA(%)</b></p>				
	<p><b>minor BCR-ABL1 mRNA, quantitative</b></p>				
	<p><b>minor BCR-ABL1 mRNA, qualitative</b></p>				
<p><b>micro BCR-ABL1 mRNA, qualitative</b></p>					
<p><b>Mutation analysis in the ABL1 region, minor BCR-ABL1</b></p>					

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>H00</b> Previous container symbol</p> <p><b>H</b></p> 	<p>Containing the preservation solution (Container capability of 5 mL)</p> <p>Additives: RPMI-1640 FBS Kanamycin sulfate Novo-heparin sodium Sodium bicarbonate HEPES</p> <p>Storage conditions: Freeze</p> <p>Shelf-life: Use this after confirming that the solution color has turned to pale pink. The color turns to pale yellow after freezing and to pale pink after thawing.</p>	bone marrow fluid 1.0 each	bone marrow fluid (with the preservation solution) 1.0 each	R	TCF3-PBX1 mRNA, quantitative
					TCF3-PBX1 mRNA, qualitative
					PML-RARA mRNA, quantitative
					PML-RARA mRNA, qualitative
					CBFB-MYH11 mRNA, quantitative
					CBFB-MYH11 mRNA, qualitative
					RUNX1-RUNX1T1 mRNA, quantitative
					RUNX1-RUNX1T1 mRNA, qualitative
					RUNX1-MECOM mRNA, qualitative
					ETV6-RUNX1 mRNA, quantitative
ETV6-RUNX1 mRNA, qualitative					

Obtain 1.0 mL of bone marrow fluid into a container shown in the left image aseptically, mix well, and refrigerate the specimen. Please submit a sample on the day it is collected.

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>H00</b> Previous container symbol</p> <p><b>H</b></p> 	<p>KMT2A-AFF1 mRNA, quantitative</p>	bone marrow fluid 1.0 each	bone marrow fluid (with the preservation solution) 1.0 each	R	<p>Obtain 1.0 mL of bone marrow fluid into a container shown in the left image aseptically, mix well, and refrigerate the specimen. Please submit a sample on the day it is collected.</p>
	<p>KMT2A-AFF1 mRNA, qualitative</p>				
	<p>KMT2A-AFDN mRNA, quantitative</p>				
	<p>KMT2A-AFDN mRNA, qualitative</p>				
	<p>KMT2A-MLLT3 mRNA, quantitative</p>				
	<p>KMT2A-MLLT3 mRNA, qualitative</p>				
	<p>KMT2A-MLLT1 mRNA, quantitative</p>				
	<p>KMT2A-MLLT1 mRNA, qualitative</p>				
	<p>NUP98-HOXA9 mRNA, quantitative</p>				
	<p>STIL-TAL1 mRNA, quantitative</p>				
	<p>DEK-NUP214 mRNA, quantitative</p>				
	<p>DEK-NUP214 mRNA, qualitative</p>				
	<p>T-cell receptor <math>\beta</math>-chain <math>C\beta 1</math> rearrangement</p>				
	<p>T-cell receptor <math>\beta</math>-chain <math>J\beta 1</math> rearrangement</p>				
	<p>T-cell receptor <math>\beta</math>-chain <math>J\beta 2</math> rearrangement</p>				
	<p>T-cell receptor <math>\gamma</math>-chain <math>J\gamma</math> rearrangement</p>				
<p>T-cell receptor <math>\delta</math>-chain <math>J\delta 1</math> rearrangement</p>					
<p>Immunoglobulin H-chain <math>J_H</math> rearrangement</p>					
<p>Immunoglobulin H-chain <math>C\mu</math> rearrangement</p>					
<p>Immunoglobulin L-chain <math>J\kappa</math> rearrangement</p>					

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>H00</b> Previous container symbol</p> <p><b>H</b></p> 	<p>Containing the preservation solution (Container capability of 5 mL)</p>	<p><b>Immunoglobulin L-chain C<math>\kappa</math> rearrangement</b></p>			<p>Obtain 1.0 mL of bone marrow fluid into a container shown in the left image aseptically, mix well, and refrigerate the specimen. Please submit a sample on the day it is collected.</p>
	<p>Additives: RPMI-1640 FBS Kanamycin sulfate Novo-heparin sodium bicarbonate HEPES</p>	<p><b>Immunoglobulin L-chain C<math>\lambda</math> rearrangement</b></p>	<p>bone marrow fluid 1.0 each</p>	<p>bone marrow fluid (with the preservation solution) 1.0 each</p>	
	<p>Storage conditions: Freeze</p>	<p><b>Chimerism analysis, pre-transplant, recipient, PCR</b></p>			<p><b>R</b></p>
	<p>Shelf-life: Use this after confirming that the solution color has turned to pale pink. The color turns to pale yellow after freezing and to pale pink after thawing.</p>	<p><b>Chimerism analysis, pre-transplant, donor, PCR</b></p>	<p>umbilical cord blood 1.0</p>	<p>umbilical cord blood (with the preservation solution) 1.0</p>	<p>Collect the specified amount of sample, mix well, and refrigerate. In this method, a result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples.</p>
		<p><b>Chimerism analysis, post-transplant, PCR</b></p>	<p>bone marrow fluid 1.0</p>	<p>bone marrow fluid (with the preservation solution) 1.0</p>	

# container handling method

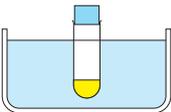
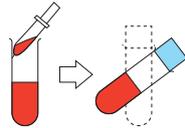
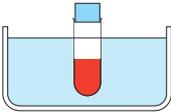
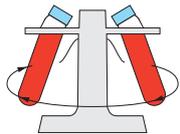
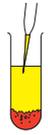
CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD	
<p><b>H20</b> Previous container symbol <b>H2</b></p> 	<p>Containing the preservation solution (Container capability of 10 mL)</p> <p>Additives: FBS PBS Kanamycin sulfate</p> <p>Storage conditions: Freeze</p> <p>Shelf-life: 1 year</p>	<p><b>Malignant lymphoma analysis (MLA), CD45 gating, test for hematopoietic malignant tumor cell</b></p> <p>lymph node 5×5×5 mm each</p>	<p>lymph node (with the preservation solution) 5×5×5 mm each</p>	R	<p>Place lymph nodes 5×5×5 mm in size in a container shown in the left image, suspend, and refrigerate. Please submit a sample on the day it is collected.</p>	
<p><b>M30</b> Previous container symbol <b>r3</b></p> 	<p>Containing deproteinization solution (Content volume of 1 mL)</p> <p>Additives: 0.8 N perchloric acid</p> <p>Storage conditions: Refrigeration</p> <p>Shelf-life: 1 year</p>	<p><b>Lactic acid</b></p>	<p>whole blood 1.0 each</p>	<p>Immediately</p> <p>Deproteinized supernatant 0.4 each</p>	R	<p>Immediately after blood sampling, pipette accurately 1.0 mL of blood into the dedicated container. After stirring thoroughly, centrifuge the tube at 3000 rpm for 5 minutes, and submit the supernatant.</p>
<p><b>M40</b> Previous container symbol <b>r4</b></p> 	<p>Containing deproteinization solution (Content volume of 4 mL)</p> <p>Additives: Sodium tungstate, sulfuric acid</p> <p>Storage conditions: Refrigeration</p> <p>Shelf-life: 1 year</p>	<p><b>Ammonia</b></p>	<p>whole blood 1.0</p>	<p>Immediately</p> <p>Deproteinized supernatant 3</p>	F	<p>Immediately after blood sampling, pipette accurately 1.0 mL of blood into the dedicated container. After stirring thoroughly, centrifuge the tube at 3000 rpm for 5 minutes, and submit the supernatant.</p>

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>M50</b> Previous container symbol</p> <p><b>r5</b></p>  <p>Containing deproteinization solution (Content volume of 0.5 mL)</p> <p>Additives: 0.8 N perchloric acid</p> <p>Storage conditions: Refrigeration</p> <p>Shelf-life: 1 year</p>	<p><b>Light Shielding</b></p> <p><b>Vitamin C (ascorbic acid)</b></p>	serum 0.5	deproteinized supernatant 0.5	<b>F</b>	Immediately after blood sampling, separate serum, and pipette accurately 0.5 mL of serum into the dedicated container. After stirring thoroughly, centrifuge the tube at 3000 rpm for 5 minutes. Transfer the supernatant into a light-shielding polyethylene test tube (ASS), freeze, and submit the specimen under frozen conditions.
<p><b>PAC</b> Previous container symbol</p> <p><b>B</b></p>  <p>Containing ACD-A solution</p> <p>Additives: ACD-A solution</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 1 year (1 month after opening the aluminum package)</p>	<p><b>Platelet associated Immunoglobulin G (PAIgG)</b></p>	whole blood 7.5	whole blood (with ACD-A solution) 7.5	<b>R</b>	After drawing the specified amount of blood, inject the blood into a container shown in the left image. After mixing well, refrigerate the specimen. (Note) If peripheral platelet count is $\leq 3 \times 10^4 / \mu\text{L}$ , use two dedicated tubes to surely collect at least 10 mL of blood.
<p><b>PAP</b> Previous container symbol</p> <p><b>D</b></p>  <p>Containing EDTA-2Na and aprotinin (3mL vacuum blood sampling tube)</p> <p>Additives: EDTA-2Na 3.75 mg Aprotinin (1500 units)</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 1 year</p>	<p><b>Parathyroid hormone related peptide (PTHrP)</b></p> <p><b>Pancreatic glucagon</b></p> <p><b>Human atrial natriuretic peptide (HANP)</b></p>	whole blood 1.5–2.0 each	<p>Refrigerated plasma 0.5</p> <p>Immediately Refrigerated plasma 0.5</p> <p>Immediately Refrigerated plasma 0.5</p>	<b>F</b>	<p>After drawing blood into a container shown in the left image, mix well, and separate plasma at low temperature (4°C). Be sure to freeze the plasma sample for storage.</p> <p>Draw blood into a container shown in the left image, mix well, separate plasma at low temperature (4°C), and freeze the specimen immediately.</p> <p>Draw the specified amount of blood into a container shown in the left image in resting conditions, mix well, and separate plasma at low temperature (4°C). Be sure to freeze the plasma sample for storage.</p>

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>PAR</b> Previous container symbol <b>B1</b></p>  <p>Containing ACD-A solution</p> <p>Additives : ACD-A solution</p> <p>Storage conditions : Room temperature</p> <p>Shelf-life: 1 year (1 month after opening the aluminum package)</p>	<p><b>Flow cytometry crossmatch, lymphocyte crossmatch test</b></p>	whole blood 7.5	whole blood (with ACD-A solution) 7.5	R	After drawing the specified amount of blood, inject the blood into a container shown in the left image. After mixing well, and store at room temperature.

CONTAINER FORM	TEST NAME	STORE TEMPERATURE	SAMPLING METHOD																										
<p><b>PBT</b> Previous container symbol <b>Q</b></p>  <p>(Do not use a vacuum tube.) Containing antiplatelet agent</p> <p>Additives: Theophylline Adenosine Dipyridamole Sodium citrate Citric acid</p> <p>Storage conditions: Refrigeration and protection from light</p> <p>Shelf-life: 1 year</p>	<p><b>β-thromboglobulin (β-TG)</b></p> <p><b>Platelet factor-4 (PF-4)</b></p>	F	 <p>Cool the dedicated container (PBT) in advance.</p>	<p>Make sure that the surface of specimen in the dedicated container is below the surface of the ice water. Do not use ice cubes.</p>																									
			 <p>Collect 3.0 mL of blood sample in a plastic syringe with a 20 gauge needle, if possible (19-21 gauge needle is also acceptable). (Do not collect blood samples directly using a dedicated container [PBT].)</p>	<p>Do not use any vacuum blood sampling tube, catheter, or other sampling methods. Also, do not use any tourniquets. Avoid drawing ≥10 mL of blood. Collect blood smoothly while avoiding any damage to the vascular walls.</p>																									
			 <p>Remove the needle and gently open the cap of the dedicated container (PBT) to gently transfer 2.7 mL of the blood sample into the tube. Invert the tube slowly 2 to 3 times.</p>	<p>Use only the dedicated container. Do not shake the dedicated container.</p>																									
			 <p>Promptly place the dedicated container in a rack with crushed ice and water.</p>	<p>Make sure that the surface of blood in the dedicated container is below the surface of the ice water.</p>																									
			<b>Proceed to the following procedures within 2 minutes.</b>																										
			 <p>After allowing the tube to stand in a crushed ice-water mixture for 15 to 30 minutes, centrifuge the tube at 2000 g for 30 minutes at 2 to 4°C. (The table below shows the rotor radius and the speed [rpm] at 2000 G.)*Equation of the rotating speed of the centrifuge <math>G = 1.118 \times 10^{-5} \times r \times n^2</math> r:radius of the centrifuge rotor (cm) n:number of revolutions per minute (rpm)</p>	<p>Make sure to centrifuge within 1 hour under cool conditions.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <caption>Conversion table</caption> <thead> <tr> <th>Radius (cm)</th> <th>Speed (rpm)</th> <th>Radius (cm)</th> <th>Speed (rpm)</th> </tr> </thead> <tbody> <tr><td>10</td><td>4200</td><td>22</td><td>2800</td></tr> <tr><td>12</td><td>3800</td><td>24</td><td>2700</td></tr> <tr><td>14</td><td>3500</td><td>26</td><td>2600</td></tr> <tr><td>16</td><td>3300</td><td>28</td><td>2500</td></tr> <tr><td>18</td><td>3100</td><td>30</td><td>2400</td></tr> <tr><td>20</td><td>3000</td><td></td><td></td></tr> </tbody> </table>	Radius (cm)	Speed (rpm)	Radius (cm)	Speed (rpm)	10	4200	22	2800	12	3800	24	2700	14	3500	26	2600	16	3300	28	2500	18	3100	30	2400	20
Radius (cm)	Speed (rpm)	Radius (cm)	Speed (rpm)																										
10	4200	22	2800																										
12	3800	24	2700																										
14	3500	26	2600																										
16	3300	28	2500																										
18	3100	30	2400																										
20	3000																												
 <p>Collect 0.3 mL of supernatant per testing sample from a little lower than the surface into a specimen container using a micropipette. Do not collect the supernatant close to the pellet. (Avoid collecting all plasma.) Make sure to freeze the specimen (stability for 1 month).</p>																													

container handling method

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>PC2</b> Previous container symbol</p> <p><b>K</b></p>  <p>Containing 3.2% sodium citrate (1.8mL vacuum blood sampling tube)</p> <p>Additives: 3.2% sodium citrate 0.2 mL</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 1 year (1 month after opening the plastic case that contains 25 tubes)</p>	Heparin	whole blood 1.8 each	Immediately plasma 0.3		<p>Draw 1.8 mL of blood into a tube containing 0.2 mL of 3.2% sodium citrate, invert the tube 5 to 6 times, and promptly separate plasma. Be sure to freeze the plasma sample for storage. (When submitting <math>\geq 1.8</math> mL of blood with multiple test requests, use the PC5 container.)</p> <p><b>[Points to note]</b></p> <p>* Please be advised of the following procedures for total PAI-1.</p> <ol style="list-style-type: none"> <li>1. Use the PC2 container for sampling, and be sure to centrifuge blood under refrigerated conditions. Avoid centrifugation at room temperature or using the PC5 container, because such procedures may cause increasing the values.</li> <li>2. If the sample cannot be separated immediately, put it in ice water and separate plasma within 1 hour.</li> </ol>
	Activated partial thromboplastin time (APTT)				
	Prothrombin time (PT)		Immediately plasma 0.5 each		
	Fibrinogen (FIB)				
	Soluble fibrin monomer complex (SFMC)		Immediately plasma 0.4		
	Fibrin monomer complex, quantitative		Immediately plasma 0.5		
	FDP, quantitative		Immediately plasma 0.3		
	D-dimer		Immediately plasma 0.5		
	Prothrombin fragment F1+2		Immediately plasma 0.3		
	Antithrombin III (AT-III)				
	Thrombin/Antithrombin complex III (TAT)		Immediately plasma 0.5 each		
	Plasminogen				
	Antiplasmin ( $\alpha_2$ plasmin inhibitor)				
	Plasmin- $\alpha_2$ -plasmin inhibitor complex (PIC test)		Immediately plasma 0.2		
Total PAI-1 (tPA/PAI-1 complex)	Immediately Refrigerated plasma 0.5				
Coagulation factor activity test	Factor VIII (F8), Chromogenic Substrate method	Immediately plasma 0.3 each			
	Factor IX (F9), Chromogenic Substrate method				

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD		
<p><b>PC2</b> Previous container symbol</p> <p><b>K</b></p>  <p>Containing 3.2% sodium citrate (1.8mL vacuum blood sampling tube)</p> <p>Additives: 3.2% sodium citrate 0.2 mL</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 1 year (1 month after opening the plastic case that contains 25 tubes)</p>	Factor II (F2)	whole blood 1.8 each	plasma 0.4 each	F	Draw 1.8 mL of blood into a tube containing 0.2 mL of 3.2% sodium citrate, invert the tube 5 to 6 times, and promptly separate plasma. Be sure to freeze the plasma sample for storage. (When submitting $\geq 1.8$ mL of blood with multiple test requests, use the PC5 container.)		
	Factor V (F5)						
	Factor VII (F7)						
	Factor VIII (F8)						
	Coagulation factor activity test					Factor IX (F9)	Immediately
	Factor X (F10)						
	Factor XI (F11)						
	Factor XII (F12)						
	Factor XIII (F13)						
	von Willebrand factor antigen assay					Immediately	plasma 0.2
	von Willebrand factor activity (ristocetin cofactor)					Immediately	plasma 0.5
	von Willebrand factor multimer analysis					Immediately	plasma 0.4
	ADAMTS13 activity					Immediately	plasma 0.3
	ADAMTS13 inhibitor					Immediately	plasma 0.6
	Protein C (antigen level)					Immediately	plasma 0.3
	Protein C activity					Immediately	plasma 0.4
	Protein S (antigen level)					Immediately	plasma 0.2
Protein S activity	Immediately	plasma 0.4					
Protein S (free antigen level)	Immediately	plasma 0.2					
Thrombomodulin	Immediately	plasma 0.4					

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<b>PC2</b> Previous container symbol <b>K</b>  	Containing 3.2% sodium citrate (1.8mL vacuum blood sampling tube)  Additives: 3.2% sodium citrate 0.2 mL  Storage conditions: Room temperature  Shelf-life: 1 year (1 month after opening the plastic case that contains 25 tubes)	whole blood 1.8 each	Immediately plasma 0.5	F	Draw 1.8 mL of blood into a tube containing 0.2 mL of 3.2% sodium citrate, invert the tube 5 to 6 times, and promptly separate plasma. Be sure to freeze the plasma sample for storage.
	<b>HIT antibody (Platelet factor 4-heparin complex antibody)</b>  <b>C1 inactivator activity (C1 esterase inhibitor activity)</b>		Immediately plasma 0.2		Draw 1.8 mL of blood into a tube containing 0.2 mL of 3.2% sodium citrate, invert the tube 5 to 6 times, and promptly separate plasma. Be sure to freeze the plasma sample for storage. (When submitting ≥1.8 mL of blood with multiple test requests, use the PC5 container.)
CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<b>PC5</b> Previous container symbol <b>L</b>  	Containing 3.2% sodium citrate (4.5mL vacuum blood sampling tube)  Additives: 3.2% sodium citrate 0.5 mL  Storage conditions: Room temperature  Shelf-life: 1 year (1 month after opening the plastic case that contains 25 tubes)	whole blood 4.5 each	Light Shielding Immediately plasma 2.0	F	Draw 4.5 mL of blood into a tube containing 0.5 mL of 3.2% sodium citrate, invert the tube 5 to 6 times, and promptly separate plasma. Be sure to use the "light-shielding polyethylene test tube (ASS)" when submitting plasma samples. Be sure to freeze the plasma sample for storage.
	Coagulation inhibitor identification Factor VIII Factor IX		Immediately plasma 1.0 each		Draw 4.5 mL of blood into a tube containing 0.5 mL of 3.2% sodium citrate, invert the tube 5 to 6 times, and promptly separate plasma. Be sure to freeze the plasma sample for storage.
	Lupus-anticoagulant		Immediately plasma 1.0		Centrifuge at ≥ 1500 G for 15 minutes at room temperature immediately after blood is drawn, take plasma at the position of ≥ 5 mm above the buffy coat, and submit it under frozen conditions. Handle the samples with care to avoid platelet contamination which may affect the results. *Equation of the rotating speed of the centrifuge $G = 1.118 \times 10^{-5} \times r \times n^2$ r: radius of the centrifuge rotor (cm) n: number of revolutions per minute (rpm)

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>PCD</b></p> <p>Previous container symbol</p> <p><b>Pd</b></p> 	<p>Containing EDTA and cell preservative (8.5mL vacuum blood sampling tube)</p> <p>Additives: EDTA and cell preservative</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 18 months</p>	<b>RAS gene mutational analysis (BEAMing)</b>	whole blood (with EDTA and cell preservative) 8.5	<p><b>R</b></p> <p>After drawing blood into a container shown in the left image, mix well, and store at room temperature. Please submit a sample on the day it is collected.</p>	
	<p><b>FoundationOne Liquid CDx Cancer genome profile</b></p>	whole blood (with EDTA and cell preservative) 17.0×2			
CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>PCF</b></p> 	<p>Containing Cell-Free DNA BCT CE (10mL vacuum blood sampling tube)</p> <p>Additives: Cell-Free DNA BCT CE</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years</p>	<b>RAS gene mutational analysis (BEAMing)</b>	whole blood (with Cell-Free DNA BCT CE) 10.0	<p><b>R</b></p> <p>After drawing blood into a container shown in the left image, mix well, and store at room temperature. Please submit a sample on the day it is collected.</p>	
CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>PE2</b></p> <p>Previous container symbol</p> <p><b>T3</b></p> 	<p>(2mL vacuum blood sampling tube)</p> <p>Additives: Novo-heparin 15 IU</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 1 year</p>	<b>Endotoxin, quantitative</b>	<p>whole blood (with Novo-heparin) 2.0 each</p>	<p><b>R</b></p> <p>After drawing blood into a container shown in the left image, mix well. Promptly refrigerate the specimen. The data will be affected if it is kept at room temperature. Avoid putting in another request at the same time, except for <math>\beta</math>-D-glucan.</p>	
	<b><math>\beta</math>-D-glucan</b>	<p>After drawing blood into a container shown in the left image, mix well. Promptly refrigerate the specimen. Avoid putting in another request at the same time, except for Endotoxin quantitative.</p>			

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLING METHOD			
<p><b>PE4</b> Previous container symbol</p> <p><b>T4</b></p>   <p>(4.0mL vacuum blood sampling tube)</p> <p>Additives: Stabilizer 0.1 mL</p> <p>Storage conditions: Refrigeration</p> <p>Shelf-life: 1 year</p>	Solution A	Dialysis fluid (containing stabilizer) 4.0 each	R		<p><b>1</b></p> 	<p>Pull up the color cap of the PE4 container towards the arrow direction to open while keeping one edge of the cap on the aluminum part (so that the cap stays on the top edge). Clean the rubber stopper with an alcohol disinfection cotton.</p>		
	Solution B				<p><b>2</b></p> 		<p>Aseptically collect dialysis fluid using a needle-attached syringe, and inject into the PE4 container by pushing the needle through the rubber stopper.</p>	
	RO water				<p><b>3</b></p> 			<p>After injection, cover the color cap to the original state. Promptly shake the container about 4 times to mix the stabilizer uniformly. Promptly refrigerate, and submit the specimen.</p>
	Preparation solution							
	others							

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>PF2</b> Previous container symbol</p> <p><b>E</b></p>   <p>Containing sodium fluoride (2mL vacuum blood sampling tube)</p> <p>Additives: Sodium fluoride 2.5 mg Heparin sodium 25 uspu EDTA-2Na 7.4 mg</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years</p>	Glucose	whole blood 1.5-2.0	plasma 0.5		After drawing blood into a container shown in the left image, mix well, and separate plasma. Refrigerate the plasma samples.
	Hemoglobin A1c (HbA1c) (NGSP)	whole blood (with sodium fluoride) 2.0		R	After drawing blood into a container shown in the left image, mix well, and refrigerate the specimen.
	Glycoalbumin	whole blood 2.0	plasma 0.5		After drawing blood into a container shown in the left image, mix well, and separate plasma. Refrigerate the plasma samples.

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>PH5</b> Previous container symbol <b>G</b></p>  <p>Containing heparin (5mL vacuum blood sampling tube)</p> <p>Additives: Heparin sodium 65IU</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years</p>	<b>γ-aminobutyric acid (GABA)</b>	whole blood 3.0	plasma 1.0 <b>Immediately</b>	<b>F</b>	After drawing blood into a container shown in the left image, mix well, and separate plasma immediately. Be sure to freeze the plasma sample for storage.
	<b>Fatty acid fractionation (24)</b>	whole blood 1.5–2.0 each	plasma 0.5 each	<b>R</b>	Draw blood into a container shown in the left image under fasted conditions in the early morning, mix well, and separate plasma. Refrigerate the plasma samples.
	<b>Fatty acid fractionation (4)</b>				
	<b>Very long chain fatty acid</b>	whole blood 4.5–5.0	plasma 2.0		After drawing blood into a container shown in the left image, mix well, and separate plasma. Freeze the plasma samples for storage.
	<b>Lipoprotein lipase (LPL)</b>	whole blood 1.5–2.0	plasma 0.3 <b>Immediately Refrigerated</b>	<b>F</b>	Provide a patient with 30 units of heparin per kilogram of body weight intravenously under fasted conditions in the early morning. 15 minutes later, draw blood into a container shown in the left image, and centrifuge the blood at low temperature (4°C). Be sure to freeze the plasma sample for storage.
	<b>Nicotinic acid (niacin)</b>	whole blood (with heparin) 1.5		<b>R</b>	After drawing blood into a container shown in the left image, mix well, and refrigerate the specimen.
	<b>Lead (Pb)</b>	whole blood (with heparin) 3.0			
	<b>Chromium</b>	whole blood (with heparin) 0.7			
	<b>Cadmium</b>	whole blood (with heparin) 0.5			
	<b>Manganese</b>	whole blood (with heparin) 0.7			
	<b>Ethanol</b>	whole blood (with heparin) 1.0			
	<b>Voriconazole</b>	whole blood 1.5–2.0 each	plasma 0.3	<b>R</b>	After drawing blood into a container shown in the left image, mix well, and separate plasma. Refrigerate the plasma samples.
	<b>Carbamazepine</b>		plasma 0.5 each		
	<b>Ethosuximide</b>				
<b>Phenobarbital</b>					
<b>Phenytoin</b>	plasma 0.3				
<b>Primidone</b>					
<b>Valproate</b>	plasma 0.5				

container handling method

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>PH5</b> Previous container symbol</p> <p><b>G</b></p>  <p>Containing heparin (5mL vacuum blood sampling tube)</p> <p>Additives: Heparin sodium 65IU</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years</p>	Gabapentin	whole blood 1.5-2.0 each	plasma 0.3 each		<p><b>R</b> After drawing blood into a container shown in the left image, mix well, and separate plasma. Refrigerate the plasma samples.</p>
	Lamotrigine				
	Topiramate				
	Levetiracetam				
	Stiripentol				
	Perampanel				
	Lacosamide				
	Amiodarone				
	Bepridil				
	Aprindine				
	Disopyramide	plasma 0.4			
	Procainamide	plasma 0.3 each			
	Propranolol	plasma 1.3			
	Pilsicainide	plasma 0.4			
	Cibenzoline	plasma 0.3			
	Pirmenol	whole blood 3.0-4.0	plasma 1.3		
	Quinidine	whole blood 1.5-2.0 each	plasma 0.4		
Flecainide	plasma 0.3				
Theophylline	plasma 0.5 each				
Methotrexate					

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD	
<p><b>PH5</b> Previous container symbol</p> <p><b>G</b></p>  <p>Containing heparin (5mL vacuum blood sampling tube)</p> <p>Additives: Heparin sodium 65IU</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years</p>	CCR4 protein, FCM	whole blood (with heparin) 5.0 each		R	After drawing blood into a container shown in the left image, mix well, and store at room temperature. Please submit a sample on the day it is collected.	
	Tuberculosis specific IFN- $\gamma$	whole blood (with heparin) 5.0 each		R	After drawing blood into a container shown in the left image, mix well, and store at room temperature (18-25°C). Please submit a sample on the day it is collected.	
	Presepsin	whole blood 1.5-2.0	plasma 0.4	F	After drawing blood into a container shown in the left image, gently invert the tube 2 to 3 times, and separate plasma immediately. Be sure to freeze the plasma sample for storage. Avoid excessive mix by a vortex mixer or others, mild stirring for a long time, or freeze-thawing method that may cause the elevated values. Avoid putting in another request at the same time.	
	CD34, quantitative	whole blood (with heparin) 5.0			After drawing blood into a container shown in the left image, mix well, and store at room temperature. Freeze the sample containing DMSO. Avoid putting in another request at the same time. Please submit a sample on the day it is collected.	
	Erythrocyte surface marker analysis CD55	whole blood (with heparin) 1.0 each			After drawing blood into a container shown in the left image, mix well, and store at room temperature. Please submit a sample on the day it is collected.	
	Erythrocyte surface marker analysis CD59	whole blood (with heparin) 1.0 each				
	Leukemia/lymphoma analysis (LLA), CD45 gating, test for hematopoietic malignant tumor cells	whole blood (with heparin) 5.0 each				
	Malignant lymphoma analysis (MLA), CD45 gating, test for hematopoietic malignant tumor cells	whole blood (with heparin) 5.0 each				
	T cell percentage B cell percentage	whole blood (with heparin) 3.0			After drawing blood into a container shown in the left image, mix well, and store at room temperature (17-25°C). Draw a larger amount of blood from patients with low levels of lymphocytes. Please submit a sample on the day it is collected.	
	B-cell surface immunoglobulin (Sm-Ig)	IgG IgA IgM IgD K L	whole blood (with heparin) 1.0 each		R	After drawing blood into a container shown in the left image, mix well, and store at room temperature (17-25°C). Draw a larger amount of blood from patients with low levels of lymphocytes. (3.0 mL when requesting $\geq 3$ test items) Please submit a sample on the day it is collected.
	Lymphocyte surface marker automated analysis by monoclonal antibodies	whole blood (with heparin) 3.0 each			After drawing blood into a container shown in the left image, mix well, and store at room temperature. (Collect 5.0 mL of blood when requesting at least 10 items.) Please submit a sample on the day it is collected.	
	Lymphocyte surface marker analysis by two-color analysis	whole blood (with heparin) 3.0 each			After drawing blood into a container shown in the left image, mix well, and store at room temperature. (Collect 5.0 mL of blood when requesting at least 10 items.) Please submit a sample on the day it is collected.	
	IgG-FcR <sup>+</sup> /T-cell percentage	whole blood (with heparin) 1.0			After drawing blood into a container shown in the left image, mix well, and store at room temperature (17-25°C). Draw a larger amount of blood from patients with low levels of lymphocytes. Please submit a sample on the day it is collected.	
	Platelet surface marker analysis CD41	whole blood (with heparin) 5.0 each			After drawing blood into a container shown in the left image, mix well, and store at room temperature. Please submit a sample on the day it is collected.	
	Platelet surface marker analysis CD42b	whole blood (with heparin) 5.0 each				
Th1/Th2 (IFN- $\gamma$ $\times$ IL-4/CD4)	whole blood (with heparin) 3.0			After drawing blood into a container shown in the left image, mix well, and store at room temperature. Please submit a sample on the day it is collected.		

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>PH5</b> Previous container symbol</p> <p><b>G</b></p>  <p>Containing heparin (5mL vacuum blood sampling tube)</p> <p>Additives: Heparin sodium 65IU</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years</p>	<p>Cytomegalovirus-specific CTL assay (HLA-A*0201)</p> <p>Cytomegalovirus-specific CTL assay (HLA-A*2402)</p>	<p>whole blood (with heparin) 5.0 each</p>		<p><b>R</b></p>	<p>After drawing blood into a container shown in the left image, mix well, and store at room temperature. Please submit a sample on the day it is collected.</p>
	<p>G-Banding</p> <p>Congenital chromosomal anomalies</p> <p>C-Banding</p> <p>Q-Banding</p> <p>High-resolution banding</p> <p>Chromosome analysis using spectral karyotyping (SKY) (Congenital anomaly)</p> <p>Fragile X chromosome (Fragile X syndrome)</p> <p>Chromosome 1 (1p36 deletion syndrome)</p> <p>Chromosome 4 (Wolf-Hirschhorn syndrome)</p> <p>Chromosome 5 (Sotos syndrome)</p> <p>Chromosome 7 (Williams syndrome)</p> <p>Congenital chromosomal anomaly, Chromosome 13</p> <p>Chromosome 13 (Congenital retinoblastoma, RB1)</p> <p>Chromosome 15 (Prader-Willi syndrome)</p> <p>Chromosome 15 (Angelman syndrome)</p> <p>Chromosome 17 (Miller-Dieker syndrome)</p> <p>Congenital chromosomal anomaly, Chromosome 18</p> <p>Congenital chromosomal anomaly, Chromosome 21</p> <p>Chromosome 22 (22q11 deletion) (CATCH22)</p> <p>Conotruncal anomaly face syndrome</p> <p>Velo-cardio-facial syndrome</p> <p>DiGeorge syndrome</p> <p>Congenital chromosomal anomalies Chromosome X</p> <p>Chromosome X (Steroid sulfatase [STS] gene)</p>				<p>whole blood (with heparin) 3.0 each</p>

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD	
<p><b>PH5</b> Previous container symbol</p> <p><b>G</b></p>  <p>Containing heparin (5mL vacuum blood sampling tube)</p> <p>Additives: Heparin sodium 65IU</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years</p>	Congenital chromosomal anomalies Chromosome Y		whole blood (with heparin) 3.0 each			
	Chromosome Y (Sex-determining region Y [SRY])					
	Chromosomes XY (Short stature homeobox [SHOX])					
		Chromosome anomaly associated with hematological disorders, G-Banding		whole blood (with heparin) 5.0 each		
		Chromosome analysis using spectral karyotyping (SKY) (Hematological disorder)				
		TCF3-PBX1 t(1;19) translocation				
		CKS1B 1q21 amplification				
		ALK 2p23 translocation				
		GATA2-MECOM inv(3) inversion, t(3;3) translocation				
		BCL6 3q27 translocation				
		IGH-FGFR3 t(4;14) translocation				
		FIP1L1-PDGFR4 4q deletion (4q12 deletion)				
		CSF1R 5q deletion				
		EGR1 5q deletion				
		PDGFRB 5q32 translocation				
	D7S486 7q deletion/ Chromosome 7 monosomy					
	Chromosome anomaly associated with hematological disorders, Chromosome 8				<p><b>R</b> After drawing blood into a container shown in the left image, mix well, and refrigerate the specimen. Please submit a sample on the day it is collected.</p>	

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD				
<p><b>PH5</b> Previous container symbol</p> <p><b>G</b></p>  <p>Containing heparin (5mL vacuum blood sampling tube)</p> <p>Additives: Heparin sodium 65IU</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years</p>	<p><b>MYC 8q24 translocation</b></p>	whole blood (with heparin) 5.0 each	5.0	<b>R</b>	<p>After drawing blood into a container shown in the left image, mix well, and refrigerate the specimen. Please submit a sample on the day it is collected.</p>				
	<p><b>IGH-MYC t(8;14) translocation</b></p>								
	<p><b>RUNX1-RUNX1T1 (AML1-MTG8) t(8;21) translocation</b></p>								
	<p><b>FGFR1 8p11.2 translocation</b></p>								
	<p><b>BCR-ABL1 t(9;22) translocation</b></p>								
	<p><b>Peripheral blood neutrophils BCR-ABL1 t(9;22) translocation</b></p>				<p>After drawing blood into a container shown in the left image, mix well, and refrigerate the specimen. Submit the specimens promptly after blood sampling. If more than 30 hours has passed from sample collection, the sample cannot be used for the test due to cellular morphological changes which may affect the test result.</p>				
	<p><b>KMT2A (MLL) 11q23.3 translocation</b></p>							<b>R</b>	<p>After drawing blood into a container shown in the left image, mix well, and refrigerate the specimen. Please submit a sample on the day it is collected.</p>
	<p><b>IGH-CCND1 (IGH-BCL1) t(11;14) translocation</b></p>								
	<p><b>NUP98 11p15 translocation</b></p>								
	<p><b>BIRC3-MALT1 (API2-MALT1) t(11;18) translocation</b></p>								
	<p><b>ATM 11q deletion</b></p>								
	<p><b>Chromosome anomaly associated with hematological disorders, Chromosome 12</b></p>								
	<p><b>ETV6-RUNX1 (TEL-AML1) t(12;21) translocation</b></p>								
	<p><b>D13S319 13q deletion</b></p>								
	<p><b>IGH-BCL2 t(14;18) translocation</b></p>								
	<p><b>IGH-MAF t(14;16) translocation</b></p>								
	<p><b>PML-RARA t(15;17) translocation</b></p>								
<p><b>CBFB inv(16) inversion, t(16;16) translocation</b></p>									
<p><b>TP53 17p deletion</b></p>									
<p><b>MALT1 18q21 translocation</b></p>									
<p><b>BCL2 18q21 translocation</b></p>									

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD	
<p><b>PH5</b> Previous container symbol</p> <p><b>G</b></p>  <p>Containing heparin (5mL vacuum blood sampling tube)</p> <p>Additives: Heparin sodium 65IU</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years</p>	<p><b>20q deletion</b></p> <p><b>Chromosome anomaly associated with hematological disorders, Chromosome X</b></p> <p><b>Chromosome anomaly associated with hematological disorders, Chromosome Y</b></p> <p><b>Sex-mismatched bone marrow transplantation (BMT) (Chromosomes XY)</b></p>	<p>whole blood (with heparin) 5.0 each</p>		<p>R</p>	<p>After drawing blood into a container shown in the left image, mix well, and refrigerate the specimen. Please submit a sample on the day it is collected.</p>	
	<p><b>FLT3 mutational analysis ITD/TKD</b></p>				<p>whole blood (with heparin) 3.0</p>	<p>After drawing blood into a container shown in the left image, mix well, and refrigerate the specimen. Avoid putting in another request at the same time. In this method, a result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples.</p>

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>PH9</b> Previous container symbol <b>I</b></p>  <p>Containing heparin (10mL vacuum blood sampling tube)</p> <p>Additives: Heparin sodium 130IU</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years</p>	<p><b>Lymphocyte blastoid transformation by PHA</b></p> <p><b>Lymphocyte blastoid transformation by Con-A</b></p>		<p>whole blood (with heparin) 5.0 each</p>		<p>After drawing blood into a container shown in the left image, mix well, and store at room temperature (17–25°C). Draw a larger amount of blood from patients with low levels of lymphocytes. (8.0 mL when requesting the 2 test items at the same time) Please submit a sample on the day it is collected.</p>
	<p><b>Drug-induced lymphocyte stimulation test (DLST)</b></p>				
	<p><b>Mixed lymphocyte culture (MLC)</b></p>		<p>whole blood (with heparin) (Recipient) 20.0 (donor) 10.0 (unrelated donor) 10.0</p>		<p>Draw 20.0 mL (<math>\times 2</math>) of blood from a recipient, 10.0 mL (<math>\times 1</math>) of blood from a donor, and blood 10.0 mL (<math>\times 1</math>) of blood from an unrelated donor into a container shown in the left image, mix well, and store at room temperature. Do not open the container or transfer samples. MLC is necessary to keep lymphocytes cultured in sterile conditions. Fill name of institution and subject name on the container label. Draw a larger amount of blood from patients with low levels of lymphocytes.</p>

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>PHS</b> Previous container symbol <b>G3</b></p>  <p>Containing heparin (4mL vacuum blood sampling tube)</p> <p>Additives: Heparin sodium 83.6 units</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 18 months (1 month after opening the aluminum package)</p>	<p><b>Light Shielding</b> <b>Coproporphyrin</b></p>	<p>whole blood (with heparin) 1.5 each</p>	<p>1.5</p>	<p>R</p>	<p>After drawing blood into a light-shielding container shown in the left image, mix well, and refrigerate the specimen. Be sure to use the light-shielding container.</p>
	<p><b>Light Shielding</b> <b>Uroporphyrin</b></p>				
	<p><b>Light Shielding</b> <b>Protoporphyrin</b></p>				

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>PK2</b> Previous container symbol <b>g</b></p>  <p>Containing EDTA-2K (2mL vacuum blood sampling tube)</p> <p>Additives: EDTA-2K 3.8 mg</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years</p>	<p><b>Peripheral blood general test</b></p>	<p>whole blood (with EDTA-2K) 2.0 each</p>	<p>2.0</p>	<p>R</p>	<p>After drawing blood into a container shown in the left image. Immediately after collecting, gently mix the blood by inverting the tube <math>\geq 5</math> times, and refrigerate the specimen. We cannot test hemolytic, coagulated, or frozen samples. Please submit a sample on the day it is collected.</p>
	<p><b>Reticulocyte count</b></p>				
	<p><b>Eosinophil granulocyte count</b></p>				
	<p><b>Complete blood count (CBC)</b></p>				
	<p><b>NCC Oncopanel System</b></p>				

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>PK5</b> <b>PK7</b></p>  <p>For 5mL (PK5) For 7mL (PK7)</p>	<p>Containing EDTA-2K (5mL or 7mL vacuum blood sampling tube)</p> <p>Contents: EDTA-2K 9.5 mg or 13.3 mg</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years</p>	<b>EGFR mutation analysis v2.0 (plasma)</b>	whole blood 10.0-14.0	plasma 5.0	<p><b>F</b></p> <p>Draw a sufficient volume of blood to obtain the required specimen (5mL of plasma) into a tube shown in the left image. After blood sampling, make sure to separate plasma within 4 hours.</p> <p>Immediately after the separation, pipette 2.5 mL each of plasma into 2 sterile polyethylene test tubes (ARR) and store them frozen.</p> <p>Decanting is not permitted when obtaining the plasma aliquots to avoid contamination with leukocyte-derived genomic DNA.</p> <p>Avoid putting in another request at the same time. In this method, the result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples.</p>

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>PKF</b></p> <p>Previous container symbol <b>g1</b></p> 	<p>Containing EDTA-2K (2mL vacuum blood sampling tube)</p> <p>Additives: EDTA-2K 3.6 mg</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 1 year</p>	<p><b>Vitamin B1</b></p> <p><b>Light Shielding</b></p> <p><b>Vitamin B2</b></p> <p><b>Cyclosporine</b></p> <p><b>Tacrolimus</b></p> <p><b>Everolimus</b></p>	<p>whole blood (with EDTA-2K) 0.5 each</p> <p>whole blood (with EDTA-2K) 0.7 each</p> <p>whole blood (with EDTA-2K) 1.0</p>	<p><b>F</b></p>	<p>After drawing blood into a container shown in the left image, mix well, and freeze the specimen.</p> <p>Draw blood into the designated container, and mix well. Transfer the blood into a light-shielding polyethylene test tube (ASS), submit the specimen under frozen conditions.</p> <p>After drawing blood into a container shown in the left image, mix well, and freeze the blood.</p> <p>Please note that this cannot be requested simultaneously with other test items.</p>

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD			
<p><b>PN2</b> <b>PN5</b> Previous container symbol <b>C</b></p> <p>For 2 mL (PN2)</p> <p>For 5 mL (PN5)</p>	<p><b>Pancreatic phospholipase A<sub>2</sub> (pancreatic PLA<sub>2</sub>)</b></p>	<p>whole blood 1.5–2.0 each</p>	<p>Refrigerated plasma 0.3</p>		<p>After drawing blood into a container shown in the left image, mix well, and separate plasma at low temperature (4°C). Be sure to freeze the plasma sample for storage.</p>			
	<p><b>Amino acid analysis, 39 types, LC/MS</b></p>				<b>F</b>	<p>Promptly after drawing blood into a container shown in the left image, mix well, and separate plasma at low temperature (4°C). Be sure to freeze the plasma sample for storage.</p>		
	<p><b>Amino acid analysis, 9 types, LC/MS</b></p>			<p>Immediately Refrigerated plasma 0.5 each</p>				
	<p><b>Amino acid analysis, 2 types (tyrosine/phenylalanine), LC/MS</b></p>							
	<p><b>Homocystein, total</b></p>			<p>Immediately plasma 0.3</p>				
	<p><b>Rufinamide</b></p>			<p>plasma 0.3</p>		<b>R</b>	<p>After drawing blood into a container shown in the left image, mix well, and separate plasma. Refrigerate the plasma samples.</p>	
	<p><b>Mycophenolic acid</b></p>			<p>plasma 0.5</p>				
	<p><b>Imatinib</b></p>			<p>plasma 0.3</p>				
	<p><b>Adrenocorticotrophic hormone (ACTH)</b></p>				<p>Immediately Refrigerated plasma 0.5</p>		<b>F</b>	<p>Promptly after drawing blood into a container shown in the left image in resting conditions in the early morning, mix well, and separate plasma at low temperature (4°C). Be sure to freeze the plasma sample for storage.</p>
	<p><b>Parathyroid hormone (whole PTH)</b></p>				<p>plasma 0.5 each</p>		<b>R</b>	<p>After drawing blood into a container shown in the left image, mix well, and separate plasma. Refrigerate the plasma samples.</p>
<p><b>Cortisol</b></p>					<b>F</b>	<p>Draw blood into a container shown in the left image in resting conditions in the early morning, mix well, and separate plasma. Freeze the plasma samples for storage.</p>		

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD	
<p><b>PN2</b> <b>PN5</b> Previous container symbol <b>C</b></p>  <p>For 2 mL (PN2)</p>  <p>For 5 mL (PN5)</p>	<p>Containing EDTA-2Na (2 or 5mL vacuum blood sampling tube)</p> <p>Additives: EDTA-2Na 3.0 or 7.5 mg</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years</p>	Serotonin	whole blood (with EDTA-2Na) 1.0		After drawing blood into a container shown in the left image, mix well. Transfer the blood into a polyethylene test tube, and freeze the specimen.	
		Aldosterone, CLEIA	whole blood 1.5-2.0 each	plasma 0.5 each	Draw blood into a container shown in the left image, mix well, and separate plasma. Freeze the plasma samples for storage.	
		Renin concentration (ARC), CLEIA			After drawing blood into a container shown in the left image, mix well, and separate plasma. Be sure to freeze the plasma sample for storage.	
		Renin activity (PRA), EIA		Refrigerated plasma 0.7	<b>F</b>	After drawing blood into a container shown in the left image, mix well, and separate plasma at low temperature (4°C). Be sure to freeze the plasma sample for storage.
		Aldosterone, CLEIA/Renin concentration ratio	whole blood 4.0 each	plasma 1.0		After drawing blood into a container shown in the left image, mix well, and separate plasma. Be sure to freeze the plasma sample for storage.
		Aldosterone, CLEIA/Renin activity ratio		Refrigerated plasma 1.2		After drawing blood into a container shown in the left image, mix well, and separate plasma at low temperature (4°C). Be sure to freeze the plasma sample for storage.
		Cyclic AMP	whole blood 1.5-2.0 each	Refrigerated plasma 0.3		After drawing blood into a container shown in the left image, mix well, and separate plasma at low temperature (4°C). Be sure to freeze the plasma sample for storage.

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD		
<p><b>PN2</b> <b>PN5</b> Previous container symbol <b>C</b></p>  <p>For 2 mL (PN2)</p> <p>For 5 mL (PN5)</p>	<p>Containing EDTA-2Na (2 or 5mL vacuum blood sampling tube)</p> <p>Additives: EDTA-2Na 3.0 or 7.5 mg</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years</p>	whole blood 1.5-2.0 each	Human brain natriuretic peptide (BNP)	Immediately plasma 0.5	F	Drawing blood into a container shown in the left image in resting conditions, and mix well. Separate plasma within 6 hours in refrigerated conditions. Promptly freeze the plasma for storage.	
			PIVKA-II	plasma 0.5	R	After drawing blood into a container shown in the left image, mix well, and separate plasma. Refrigerate the plasma samples.	
			Pro-gastrin-releasing peptide (ProGRP)	plasma 0.4	F	After drawing blood into a container shown in the left image, mix well, and separate plasma. Be sure to freeze the plasma sample for storage.	
			Bird allergen-specific IgG antibody	plasma 0.5		After drawing blood into a container shown in the left image, mix well, and separate plasma. Refrigerate the plasma samples.	
		ABO blood groups test	whole blood (with EDTA-2Na) 2.0 each		R		After drawing blood into a container shown in the left image, mix well, and refrigerate the specimen.
		Rh (D) blood group test					
		Blood group Rh-Hr type					
		Blood type incompatibility	whole blood 10.0-12.0 (in a separate container) and whole blood 2.0	Immediately serum 4.0 and whole blood (with EDTA-2Na) 2.0			Draw 2.0 mL of blood into a container shown in the left image, mix well, and promptly submit the specimen under room temperature conditions. Also, draw 10.0 to 12.0 mL of blood in a separate container, promptly separate serum, and refrigerate the specimen. Avoid putting in another request at the same time.
			Direct coombs test	whole blood (with EDTA-2Na) 1.0	R	After drawing blood into a container shown in the left image, mix well, and promptly submit the specimen in room temperature conditions. Avoid putting in another request at the same time.	
		Irregular antibody (Antibody identification/ antibody titer measurement)	whole blood 10.0-15.0 (in a separate container) and whole blood 2.0	Immediately serum 5.0 and whole blood (with EDTA-2Na) 2.0	R		Draw 2.0 mL of blood into a container shown in the left image, mix well, and promptly submit the specimen under room temperature conditions. Also, draw 10.0 to 15.0 mL of blood in a separate container, promptly separate serum, and refrigerate the specimen. Avoid putting in another request at the same time.
					R		
		Pentraxin 3 (PTX3)	whole blood 1.5-2.0 each	Immediately plasma 0.3		F	Promptly after drawing blood into a container shown in the left image, mix well, and separate plasma at low temperature (4°C). Be sure to freeze the plasma sample for storage.
		Interleukin-8 (IL-8)		plasma 0.5		F	After drawing blood into a container shown in the left image, mix well, and separate plasma. Be sure to freeze the plasma sample for storage.
Multiple myeloma multiparameter flow cytometry (8-color)	bone marrow fluid (with EDTA-2Na) 2.0		R		Obtain 1.0 mL of bone marrow fluid into a container shown in the left image (PN5 or PN2), mix well, and store at room temperature. Please submit a sample on the day it is collected.		

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p>                        Previous container symbol                                                 For 2 mL (PN2)                                              For 5 mL (PN5)                 </p>	<p>Containing EDTA-2Na (2 or 5mL vacuum blood sampling tube)</p> <p>Additives: EDTA-2Na 3.0 or 7.5 mg</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years</p>	<p>whole blood (with EDTA-2Na) 2.0 each</p>	<p>whole blood (with EDTA-2Na) 2.0 each</p>	<p>R</p>	<p>FLT3/ITD mutation analysis</p>
	<p>NPM1 mutational analysis</p>				
	<p>RET gene mutation analysis, Medullary carcinoma of the thyroid</p>				
	<p>Single site analysis for RET</p>				
	<p>TTR gene analysis (Familial amyloidosis)</p>				
	<p>TACSTD2 genetic analysis (cornea dystrophy)</p>				
	<p>Spinocerebellar degeneration gene analysis</p>				
	<p>MEFV gene analysis (Familial Mediterranean fever)</p>				
	<p>Y chromosome microdeletion (AZF region)</p>				
	<p>Drug metabolizing enzyme cytochrome P450 CYP2C19 gene polymorphism analysis</p>				
<p>UGT1A1 gene polymorphism analysis</p>					
<p>NUDT15 gene codon 139 polymorphism analysis</p>					
<p>After drawing blood into a container shown in the left image, mix well, and refrigerate the specimen. Avoid putting in another request at the same time.</p> <p>In this method, a result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples.</p>					

container handling method

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; gap: 5px;"> <div style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">PN2</div> <div style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">PN5</div> </div> <p style="font-size: small;">Previous container symbol</p> <div style="border: 1px solid black; border-radius: 50%; padding: 2px 5px; margin-bottom: 10px;">C</div>  <p style="font-size: small;">For 2 mL (PN2)</p>  <p style="font-size: small;">For 5 mL (PN5)</p> </div>	<p><b>HLA-A, B, serological typing</b></p> <hr/> <p><b>HLA-A, DNA typing</b></p> <hr/> <p><b>HLA-B, DNA typing</b></p> <hr/> <p><b>HLA-C, DNA typing</b></p> <hr/> <p><b>HLA-DR, serological typing</b></p> <hr/> <p><b>HLA-DRB1, DNA typing</b></p> <hr/> <p><b>HLA-DPB1, DNA typing</b></p> <hr/> <p><b>HLA-DQB1, DNA typing</b></p>	<p>whole blood (with EDTA-2Na) 2.0 each</p>		<span style="background-color: #e91e63; color: white; padding: 2px 5px; font-weight: bold;">R</span>	<p>After drawing blood into a container shown in the left image, mix well, and refrigerate the specimen. When requesting at least 2 HLA test items, the sufficient amount for blood test is 2.0 mL. Still, recipients may have a decreased number of cells after chemotherapy or other treatments, which may make it difficult to recover DNA; therefore, make sure to submit at least <math>2 \times 10^6</math> cells. Recipients with WBC count below <math>1000/\mu\text{L}</math> need to provide at least two 2.0mL sampling tubes (Container PN2) or one 5.0mL sampling tube (Container PN5). In this method, a result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples.</p>
	<p>Containing EDTA-2Na (2 or 5mL vacuum blood sampling tube)</p> <p>Additives: EDTA-2Na 3.0 or 7.5 mg</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years</p>				

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>PN5</b> Previous container symbol</p> <p><b>C</b></p>  <p>Containing EDTA-2Na (5mL vacuum blood sampling tube)</p> <p>Additives: EDTA-2Na 7.5 mg</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years</p>	<p><b>Herpes Simplex virus DNA, qualitative</b></p>	<p>whole blood (with EDTA-2Na) 2.0 each</p>		<p><b>R</b></p>	<p>After drawing blood into a container shown in the left image, mix well, and refrigerate the specimen. Avoid putting in another request at the same time. In this method, the result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples.</p>
	<p><b>Varicella-zoster virus DNA, qualitative</b></p>				
	<p><b>Cytomegalovirus pp65 antigen (C7-HRP)</b></p>	<p>whole blood (with EDTA-2Na) 3.0</p>		<p><b>R</b></p>	<p>After drawing blood into a container shown in the left image, mix well, and store at room temperature. Submit the specimens promptly after blood sampling. If blood within 24 hours after collection is not used, the detection rate will decrease.</p>
	<p><b>Cytomegalovirus DNA, qualitative</b></p>				
	<p><b>Epstein-Barr virus DNA, quantitative</b></p>	<p>whole blood (with EDTA-2Na) 5.0</p>	<p>plasma 2.0</p>	<p><b>R</b></p>	<p>After drawing blood into a container shown in the left image, mix well, and refrigerate the specimen. Avoid putting in another request at the same time. In this method, a result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples. After drawing blood into a container shown in the left image, mix well, and separate plasma. Refrigerate the plasma samples. Avoid putting in another request at the same time. In this method, a result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples.</p>
	<p><b>Human herpesvirus, type 6 DNA, qualitative</b></p>				
	<p><b>Human herpesvirus, type 7 DNA, qualitative</b></p>	<p>whole blood (with EDTA-2Na) 2.0 each</p>			<p>After drawing blood into a container shown in the left image, mix well, and refrigerate the specimen. Avoid putting in another request at the same time. In this method, the result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples.</p>

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>PN5</b> Previous container symbol <b>C</b></p>  <p>Containing EDTA-2Na (5mL vacuum blood sampling tube)</p> <p>Additives: EDTA-2Na 7.5 mg</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years</p>	High sensitivity PNH testing				Be sure to collect the specimen into a container shown in the left image, and submit it in refrigerated conditions. Avoid putting in another request at the same time.
	JAK2V617F mutational analysis				
	MPN gene mutational analysis				
	SNRPN gene analysis, Methylation-Specific PCR Prader-Willi syndrome Angelman syndrome				
	Congenital long QT syndrome gene analysis				
	HTT gene CAG repeat sequence		whole blood (with EDTA-2Na) 5.0 each	R	After drawing blood into a container shown in the left image, mix well, and refrigerate the specimen. Avoid putting in another request at the same time. In this method, a result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples.
	Androgen receptor gene CAG repeat sequence				
	IL28B SNPs analysis				
HLA DNA typing, NGS-SBT method					

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>PN5</b> Previous container symbol</p> <p><b>C</b></p>  <p>Containing EDTA-2Na (5mL vacuum blood sampling tube)</p> <p>Additives: EDTA-2Na 7.5 mg</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years</p>	AIRS for males (with cognitive assessments)	whole blood 5.0 each	Immediately Refrigerated plasma 0.5 each	<b>F</b>	<ol style="list-style-type: none"> <li>1. Collect approximately 5mL of blood in an EDTA-2Na-containing tube (left image).</li> <li>2. Immediately after collecting, gently mix the blood by inverting the tube 2 to 3 times (do not use a roller for mixing).</li> <li>3. Immediately after mixing (within 1 minute after mixing), cool the tube by immersing in ice water (so that the tube is immersed in an ice bath up to the level of the surface of blood) (≥15 minutes, until ready for centrifuge).</li> <li>4. Within 8 hours of blood sampling, centrifuge the sample under refrigerated conditions (4°C, 3000 rpm, 15 minutes) or under normal conditions (3000 rpm, 15 minutes, no temperature rise of the rotor).</li> <li>5. Immediately after the centrifugation, collect the supernatant plasma from the center of it without touching the interface with the blood, and dispense it.</li> <li>6. Within 4 hours of dispensing, freeze the plasma samples for storage.</li> </ol>
	AIRS for females (with cognitive assessments)				
	AIRS for males (without cognitive assessments)				
	AIRS for females (without cognitive assessments)				
	AICS for males (5 types)	whole blood (with EDTA-2Na) 8.0 × 2	<b>R</b>		
	AICS for females (6 types)				
	LHON mt DNA Evaluation	After drawing blood into a container shown in the left image, mix well, and refrigerate the specimen. Avoid putting in another request at the same time. In this method, the result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples.			
	MELAS mt DNA Evaluation				
	MERRF mt DNA Evaluation				
	NARP mt DNA Evaluation				

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD	
<p><b>PN7</b> Previous container symbol <b>A</b></p>  <p>Containing EDTA-2Na (7mL vacuum blood sampling tube)</p> <p>Additives: EDTA-2Na 10.5 mg</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years</p>	<b>Antidiuretic hormone (AVP)</b>	whole blood 4.0-5.0 each	plasma 1.5 each Immediately Refrigerated	F	Promptly after drawing blood into a container shown in the left image, mix well, and separate plasma at low temperature (4°C). Be sure to freeze the plasma sample for storage.	
	<b>Catecholamine 3 fractionation</b> A: adrenaline NA: noradrenaline DA: dopamine					
	<b>L-dopa</b>					
	<b>Dopamine, total</b>					
	<b>HVA</b>					
	<b>VMA</b>					
	<b>Serotonin</b>	plasma 1.5 each	R	After drawing blood into a container shown in the left image, mix well, and separate plasma. Refrigerate the plasma samples.		
	<b>5-Hydroxyindoleacetic Acid (5-HIAA)</b>					
	<b>3-Methoxy-4-Hydroxyphenylglycol (MHPG)</b>	whole blood (with EDTA-2Na) 5.0 each	plasma 1.5 each Immediately Refrigerated	F	Promptly after drawing blood into a container shown in the left image, mix well, and separate plasma at low temperature (4°C) at 900 rpm for 20 minutes (PRP) or at 1500 rpm for 10 minutes (P). Be sure to freeze the plasma for storage.	
	<b>Herpes simplex virus DNA, quantitative</b>					
	<b>Varicella-zoster virus DNA, quantitative</b>					
	<b>Cytomegalovirus pp65 antigen (C10, C11)</b>					
<b>Epstein-Barr virus DNA (Clonality)</b>						
<b>Human herpesvirus, type 6 DNA quantitative</b>						
<b>Herpes simplex virus DNA, quantitative</b>	R					After drawing blood into a container shown in the left image, mix well, and refrigerate the specimen. Avoid putting in another request at the same time. In this method, a result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples.
<b>Varicella-zoster virus DNA, quantitative</b>						
<b>Cytomegalovirus pp65 antigen (C10, C11)</b>	R	After drawing blood into a container shown in the left image, mix well, and refrigerate the specimen. In this method, a result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples.				
<b>Epstein-Barr virus DNA (Clonality)</b>						
<b>Human herpesvirus, type 6 DNA quantitative</b>	R	After drawing blood into a container shown in the left image, mix well, and refrigerate the specimen. In this method, a result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples.				
<b>Herpes simplex virus DNA, quantitative</b>						

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>PN7</b> Previous container symbol</p> <p><b>A</b></p>  <p>Containing EDTA-2Na (7mL vacuum blood sampling tube)</p> <p>Additives: EDTA-2Na 10.5 mg</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years</p>	HTLV-1 nucleic acid detection qualitative	whole blood (with EDTA-2Na) 7.0 each		R	After drawing blood into a container shown in the left image, mix well, and submit the specimen in refrigerated conditions. In this method, a result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples.
	HTLV-1 Provirus DNA qualitative				After drawing blood into a container shown in the left image, mix well, and refrigerate the specimen.
	HTLV-I (ATLV) Provirus DNA (Clonality)				After drawing blood into a container shown in the left image, mix well, and refrigerate the specimen. Please submit a sample on the day it is collected. Avoid putting in another request at the same time.
	MicroArray chromosomal test (Chromosomal structural variation analysis)				
	KIT sequence analysis (leukemia)				
	Screening of chimeric genes related to leukemia, quantitative				
	WT1 mRNA quantitative				
	Major BCR-ABL1 mRNA (IS)				
	Major BCR-ABL1 mRNA(%)				
	Major BCR-ABL1 mRNA, qualitative				
	Mutation analysis in the ABL1 region, Major BCR-ABL1				
	minor BCR-ABL1 mRNA(%)				
	minor BCR-ABL1 mRNA,quantitative				
	minor BCR-ABL1 mRNA, qualitative				
	micro BCR-ABL1 mRNA, qualitative				
	Mutation analysis in the ABL1 region, minor BCR-ABL1				
	TCF3-PBX1 mRNA, quantitative				
	TCF3-PBX1 mRNA, qualitative				
PML-RARA mRNA, quantitative					
PML-RARA mRNA, qualitative					

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>PN7</b> Previous container symbol</p> <p><b>A</b></p>  <p>Containing EDTA-2Na (7mL vacuum blood sampling tube)</p> <p>Additives: EDTA-2Na 10.5 mg</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years</p>	CBFB-MYH11 mRNA, quantitative	7.0	7.0	R	<p>After drawing blood into a container shown in the left image, mix well, and refrigerate the specimen. Please submit a sample on the day it is collected. Avoid putting in another request at the same time. In this method, a result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples.</p>
	CBFB-MYH11 mRNA, qualitative				
	RUNX1-RUNX1T1 mRNA, quantitative				
	RUNX1-RUNX1T1 mRNA, qualitative				
	RUNX1-MECOM mRNA, qualitative				
	ETV6-RUNX1 mRNA, quantitative				
	ETV6-RUNX1 mRNA, qualitative				
	KMT2A-AFF1 mRNA, quantitative				
	KMT2A-AFF1 mRNA, qualitative				
	KMT2A-AFDN mRNA, quantitative				
	KMT2A-AFDN mRNA, qualitative				
	KMT2A-MLLT3 mRNA, qualitative				
	KMT2A-MLLT3 mRNA, quantitative				
	KMT2A-MLLT1 mRNA, quantitative				
	KMT2A-MLLT1 mRNA, qualitative				
	NUP98-HOXA9 mRNA, quantitative				<p>whole blood (with EDTA-2Na) 7.0 each</p>
	STIL-TAL1 mRNA, quantitative				
	DEK-NUP214 mRNA, quantitative				
	DEK-NUP214 mRNA, qualitative				
	T-cell receptor $\beta$ -chain C $\beta$ 1 rearrangement				
	T-cell receptor $\beta$ -chain J $\beta$ 1 rearrangement				
	T-cell receptor $\beta$ -chain J $\beta$ 2 rearrangement				
	T-cell receptor $\gamma$ -chain J $\gamma$ rearrangement				
	T-cell receptor $\delta$ -chain J $\delta$ 1 rearrangement				
	Immunoglobulin H-chain J $_H$ rearrangement				
Immunoglobulin H-chain C $_{\mu}$ rearrangement					
Immunoglobulin L-chain J $_K$ rearrangement					
Immunoglobulin L-chain C $_K$ rearrangement					
Immunoglobulin L-chain C $_{\lambda}$ rearrangement					

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>PN7</b> Previous container symbol</p> <p><b>A</b></p>  <p>Containing EDTA-2Na (7mL vacuum blood sampling tube)</p> <p>Additives: EDTA-2Na 10.5 mg</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years</p>	<p><b>PRRT2 gene mutational analysis</b></p>	whole blood (with EDTA-2Na) 7.0 each	7.0 each		<p>After drawing blood into a container shown in the left image, mix well, and refrigerate the specimen. In this method, a result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples.</p>
	<p><b>MECP2 (exons 3 and 4) mutation analysis</b></p>				
	<p><b>Dystrophin DNA</b></p>				
	<p><b>Fukuyama-type congenital muscular dystrophy DNA insertion</b></p>				
	<p><b>Chimerism analysis, pre-transplant, recipient, PCR</b></p>				
<p><b>Chimerism analysis, pre-transplant, donor, PCR</b></p>	7.0 each	7.0 each		<p><b>R</b> After drawing blood into a container shown in the left image, mix well, and refrigerate the specimen. Also, make sure to submit a pair of specimens taken from a recipient and from a donor. In this method, a result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples.</p>	
<p><b>Chimerism analysis, post-transplant, PCR</b></p>					7.0 each

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>PNK</b> Previous container symbol</p> <p><b>R</b></p>  <p>Containing the preservation solution (5mL vacuum blood sampling tube)</p> <p>Additives: Preservation solution 0.7 mL</p> <p>Storage conditions: Refrigeration</p> <p>Shelf-life: 1 year (1 month after opening the aluminum sheet)</p>	<p><b>Natural killer cell activity</b></p>	whole blood (with the preservation solution) 5.0	5.0		<p>After drawing blood into a container shown in the left image, mix well, and refrigerate the specimen. <b>R</b> Draw a larger amount of blood from patients with low levels of lymphocytes. Please submit a sample on the day it is collected.</p>

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD		
<p><b>PNM</b> Previous container symbol</p> <p><b>g2</b></p> 	<p>Containing EDTA-2K (10mL vacuum blood sampling tube)</p>	<p>whole blood (with EDTA-2K) 7.0 each</p>			<p>After drawing blood into a container shown in the left image, mix well, and store at room temperature. Avoid putting in another request at the same time.</p> <p><b>R</b> In this method, a result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples. Please submit a sample on the day it is collected.</p>		
	<p>Additives: EDTA-2K 18mg</p>					<p><b>BRCA1/2 gene test (Breast cancer)</b></p>	<p><b>BRCA1/2 gene test (Ovarian cancer)</b></p>
	<p>Storage conditions: Room temperature</p>					<p><b>BRCA1/2 gene test (HBOC)</b></p>	<p><b>BRCA1/2 gene test (Pancreatic cancer)</b></p>
	<p>Shelf-life: 1 year</p>					<p><b>BRCA1/2 gene test (Prostate cancer)</b></p>	<p><b>Single site testing for BRCA 1/2 gene</b></p>

# container handling method

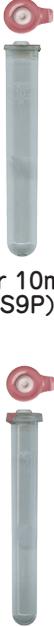
CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>PSF</b> Previous container symbol</p> <p><b>P3</b></p> 	<p>Containing EDTA-2K + plasma separating agent (5mL vacuum blood sampling tube)</p> <p>Storage conditions: 4-25°C</p> <p>Shelf-life: 1 year</p>	<p><b>Cytomegalovirus nucleic acid quantitative</b></p> <p><b>HIV-1 RNA quantitative</b></p>	<p>whole blood 5.0 each</p> <p>plasma 1.8 each</p>	<p><b>F</b></p>	<p>Draw the specified amount of blood (8 mL) into a container shown in the left image, gently invert the tube 4 to 5 times, and centrifuge the tube at room temperature. Freeze the specimen in the tube and submit it under frozen conditions. Avoid putting in another request at the same time.</p> <p>In this method, a result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples.</p>

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	SAMPLE HANDLING METHOD																												
<p><b>S09</b></p> <p><b>S06</b></p>  <p>For 9 mL (S09)</p>  <p>For 6 mL (S06)</p>	<p>Containing separating agent (9 or 6mL vacuum blood sampling tube)</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 1 year</p>	<p><b>General biochemical tests</b></p> <p><b>General serological tests</b></p> <p><b>others</b></p>	<p>As appropriate</p> <p>As appropriate</p>	<p>After drawing the necessary amount of blood into a container shown in the left image depending on the test, gently invert the tube 4 to 5 times, and allow to stand at room temperature for 30 to 60 minutes. After coagulation, centrifuge the sample. Transfer the serum into the container A00 (polyethylene test tube), and submit it. Please make sure that a sufficient amount of specimen is provided.</p> <p>The centrifugation conditions should be 2000G for 10 minutes. (The table below shows the rotor radius and the speed [rpm] at 2000G.)</p> <table border="1"> <caption>Conversion table</caption> <thead> <tr> <th>Radius (cm)</th> <th>Speed (rpm)</th> <th>Radius (cm)</th> <th>Speed (rpm)</th> </tr> </thead> <tbody> <tr> <td>10</td> <td>4200</td> <td>22</td> <td>2800</td> </tr> <tr> <td>12</td> <td>3800</td> <td>24</td> <td>2700</td> </tr> <tr> <td>14</td> <td>3500</td> <td>26</td> <td>2600</td> </tr> <tr> <td>16</td> <td>3300</td> <td>28</td> <td>2500</td> </tr> <tr> <td>18</td> <td>3100</td> <td>30</td> <td>2400</td> </tr> <tr> <td>20</td> <td>3000</td> <td></td> <td></td> </tr> </tbody> </table>	Radius (cm)	Speed (rpm)	Radius (cm)	Speed (rpm)	10	4200	22	2800	12	3800	24	2700	14	3500	26	2600	16	3300	28	2500	18	3100	30	2400	20	3000		
Radius (cm)	Speed (rpm)	Radius (cm)	Speed (rpm)																													
10	4200	22	2800																													
12	3800	24	2700																													
14	3500	26	2600																													
16	3300	28	2500																													
18	3100	30	2400																													
20	3000																															

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p>                         Previous container symbol   </p>  <p>For collecting 3 mL of blood (S3F)</p>  <p>For collecting 5mL of blood (S5F)</p>	<p>Containing coagulation accelerator + serum-separating agent (3 or 5mL vacuum blood sampling tube)</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 1 year</p>	<p><b>HBV DNA quantitative, IU</b></p>	<p>whole blood 5.0</p>	<p>serum 1.8</p>	<p>Draw the specified amount of blood into a container shown in the left image, gently invert the tube 4 to 5 times, and allow to stand at room temperature for 30 to 60 minutes. After coagulation, centrifuge the tube. Freeze the specimen in the tube and submit it under frozen conditions. Avoid putting in another request at the same time. In this method, a result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples.</p>
	<p><b>HCV RNA core genotype</b></p>	<p>whole blood 3.0</p>	<p>serum 0.5</p>	<p><b>F</b></p>	
	<p><b>HCV RNA quantitative</b></p>	<p>whole blood 5.0</p>	<p>serum 1.8</p>		

# container handling method

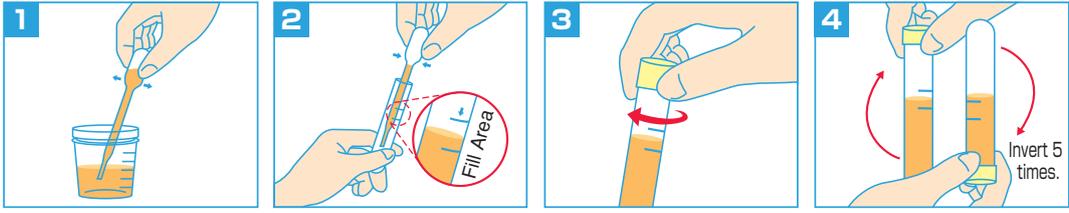
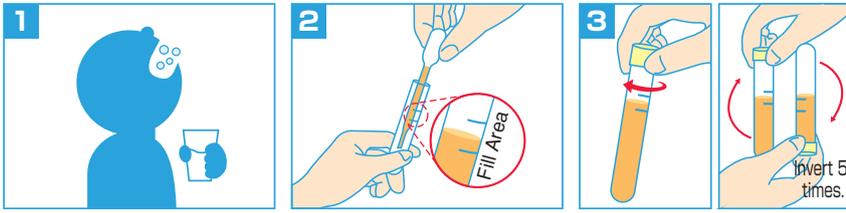
CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	SAMPLE HANDLING METHOD																												
<p><b>S9P</b> <b>S7P</b></p>  <p>For 10mL (S9P)</p> <p>For 7mL (S7P)</p>	<p>Not containing separating agent (10 or 7mL vacuum blood sampling tube)</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 1 year</p>	<p><b>drug test others</b></p>	<p>As appropriate</p> <p>As appropriate</p>	<p>After drawing the necessary amount of blood into a container shown in the left image depending on the test, gently invert the tube 4 to 5 times, and allow to stand at room temperature for 30 to 60 minutes. After coagulation, centrifuge the sample. Transfer the serum into the container A00 (polyethylene test tube), and submit it.</p> <p>The centrifugation conditions should be 2000G for 10minutes. (The table below shows the rotor radius and the speed [rpm] at 2000G.)</p> <table border="1"> <caption>Conversion table</caption> <thead> <tr> <th>Radius (cm)</th> <th>Speed (rpm)</th> <th>Radius (cm)</th> <th>Speed (rpm)</th> </tr> </thead> <tbody> <tr> <td>10</td> <td>4200</td> <td>22</td> <td>2800</td> </tr> <tr> <td>12</td> <td>3800</td> <td>24</td> <td>2700</td> </tr> <tr> <td>14</td> <td>3500</td> <td>26</td> <td>2600</td> </tr> <tr> <td>16</td> <td>3300</td> <td>28</td> <td>2500</td> </tr> <tr> <td>18</td> <td>3100</td> <td>30</td> <td>2400</td> </tr> <tr> <td>20</td> <td>3000</td> <td></td> <td></td> </tr> </tbody> </table>	Radius (cm)	Speed (rpm)	Radius (cm)	Speed (rpm)	10	4200	22	2800	12	3800	24	2700	14	3500	26	2600	16	3300	28	2500	18	3100	30	2400	20	3000		
Radius (cm)	Speed (rpm)	Radius (cm)	Speed (rpm)																													
10	4200	22	2800																													
12	3800	24	2700																													
14	3500	26	2600																													
16	3300	28	2500																													
18	3100	30	2400																													
20	3000																															

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORAGE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>SZZ</b> Previous container symbol</p> <p><b>e</b></p>  <p>Containing serum-separating agent and coagulation accelerator (3mL vacuum blood sampling tube)</p> <p>Additives: Thrombin Heparin neutralizer</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 1 year</p>	<b>Aluminum (Al)</b>	whole blood 2.5-3.0	serum 0.6	<b>R</b>	To prevent contamination, collect blood from a shunt by instillation or using a vacuum tube. Immediately after blood sampling, thoroughly mix the blood by inverting the tube. After centrifugation, submit the specimen under refrigerated conditions.

CONTAINER FORM	
<p><b>U00</b> Previous container symbol</p> <p><b>Y</b></p>  <p>Urine container</p>	Storage conditions: Room temperature

# container handling method

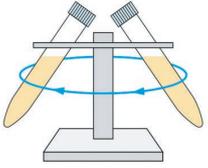
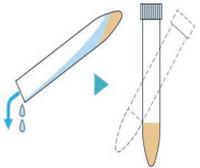
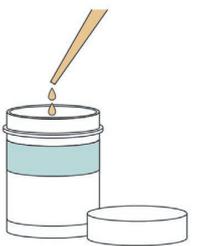
CONTAINER FORM	TEST NAME	STORE TEMPERATURE
<p><b>U10</b> Previous container symbol <b>Y1</b></p> <p>Sterile dropping pipette Sterile cup</p>  <p>Additives: Guanidine hydrochloride</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 1 year</p>	<p><b>Chlamydia trachomatis DNA</b> <b>Neisseria gonorrhoeae DNA</b> <b>Simultaneous identification of DNA of N. gonorrhoeae and C. trachomatis</b> <b>Detection of Trichomonas vaginalis (TV) and Mycoplasma genitalium (MG) DNA</b></p> <p>●Obtaining specimens from urine Collect the first-voided urine at least 1 hour after the last urination. (1) Collect the first-voided urine in a sterile cup, and transfer the urine into the dedicated container using a sterile dropping pipette. (2) Fill the urine is to the level between the lines on the dedicated container. (3) Firmly tighten the cap of the dedicated container. (4) Invert the dedicated container 5 times, and submit the specimen under room temperature.</p>  <p>●Obtaining from mouth wash specimens Patient must refrain from eating, gargling, brushing teeth, or chewing gum before collecting specimens. (1) Take 15 to 20 mL of sterile physiological saline in the mouth, tilt the head backward, and gargle vigorously for 10 to 20 seconds. (2) Collect all of the mouth wash specimen in a cup, and transfer it to the dedicated container using a dropping pipette to the level between the lines on the container. (3) Firmly tighten the cap of the dedicated container, invert the container for 5 times, and submit the specimen under room temperature. ※However, "Detection of Trichomonas vaginalis (TV) and Mycoplasma genitalium (MG) DNA" cannot be requested.</p> 	<p>R</p>

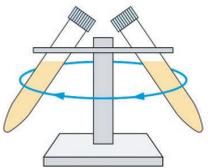
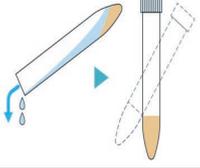
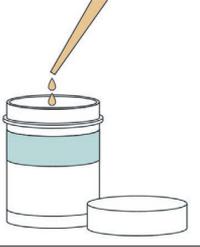
CONTAINER FORM	CONTAINER FORM
<p><b>U20</b> Urine container Storage conditions: Room temperature</p> <p>Previous container symbol <b>Y0</b></p>  <p>Pregnanediol/Pregnanetriol</p>	<p><b>U40</b> For Urinalysis, Urinary sediment Storage conditions: Room temperature</p> <p>Previous container symbol <b>Y4</b></p> 

# container handling method

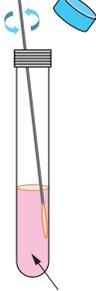
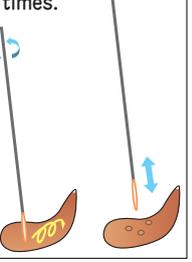
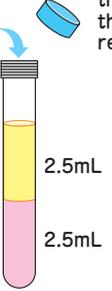
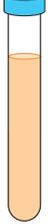
CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD	
<p><b>U50</b> Previous container symbol <b>Y5</b></p> 	<p>Containing preservative (Container capability of 10mL)</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years</p>	Myoglobin, Urine, CLEIA	random urine 6	R	Promptly after sampling, pour collected urine into the dedicated container (U50) up to the printed line on the label, mix well, and submit the specimen under refrigerated conditions. Avoid freezing.	
<p><b>U70</b> Previous container symbol <b>Y7</b></p> 	<p>Containing Tris + Hcl (Container capability of 10mL)</p> <p>Additives: 1.5 M Tris-Hcl 0.5 mL</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years</p>	Collagen type IV, Urine	random urine 5	R	Collect the first-void urine in the early morning, and transfer into a container shown in the left image. After mixing well, refrigerate the specimen. Avoid freezing and putting in another request at the same time.	
<p><b>U80</b> Previous container symbol <b>Y8</b></p> 	<p>Containing the preservation solution (Container capability of 10 mL)</p> <p>Additives: Urine stabilizer</p> <p>Storage conditions: Protection from light at room temperature</p> <p>Shelf-life: 2 years and 6 months</p>	Nuclear matrix protein 22, Urine (NMP22)	random urine As appropriate (Separate container)	Immediately random urine (supernatant) 5	R	Promptly after urine sampling, centrifuge the urine. Transfer the supernatant into the dedicated container to the specimen sampling level, and mix well. Avoid freezing and putting in another request at the same time. Submit the specimen under refrigerated conditions.
<p><b>U90</b> Previous container symbol <b>b2</b></p> 	<p>Containing the antiplasmin agent</p> <p>Additives: Aprotinin, Purified gelatin, Dehydroacetic acid, Sodium</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 2 years (1 week after opening the aluminum package)</p>	FDP, quantitative	random urine (fresh urine) 2	random urine (supernatant) 0.5	F	Collect fresh urine, and transfer into a container shown in the left image. After mixing well, centrifuge at 3000 rpm for 5 to 10 minutes. Be sure to freeze the supernatant (random urine).

# container handling method

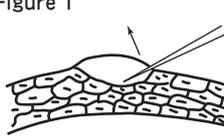
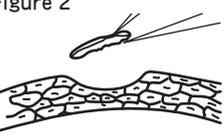
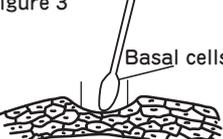
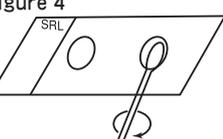
CONTAINER FORM	TEST NAME	STORE TEMPERATURE	SAMPLING METHOD		
<p><b>UV6</b> Previous container symbol <b>f3</b></p>  <p><b>Additives:</b> Methanol 55%</p> <p><b>Storage conditions:</b> Room temperature</p> <p><b>Shelf-life:</b> 1 year and 6 months</p>	<p><b>Urine cytodiagnosis (LBC)</b></p>	<p><b>R</b></p>	 <p>Centrifuge the appropriate amount of urine collected at 1500 rpm for 5 minutes.</p>	 <p>Remove the supernatant and mix the sediment well.</p>	 <p>Pipette the sediment and transfer it into a dedicated container. Firmly tighten the cap before submission. (If the amount of the sediment is too small, put the solution in the dedicated container into a test tube and transfer it again into the container.)</p>

CONTAINER FORM	TEST NAME	STORE TEMPERATURE	SAMPLING METHOD		
<p><b>UV7</b> Previous container symbol <b>f7</b></p>  <p><b>Additives:</b> Methanol 55%</p> <p><b>Storage conditions:</b> Room temperature</p> <p><b>Shelf-life:</b> 1 year and 6 months</p>	<p><b>Bladder cancer FISH (UroVysion)</b></p>	<p><b>R</b></p>	 <p>Centrifuge the proper amount of collected urine (<math>\geq 33\text{mL}</math>) at 1500rpm for 5 minutes.</p>	 <p>Remove the supernatant and mix the sediment well.</p>	 <p>Pipette the sediment and transfer it into a dedicated container before freezing. Confirm that the lid of the container is tightly closed before submission without wrapping with a parafilm.</p>
			<p>● <b>Points to note</b> Pay attention to discarding the supernatant after centrifuge because if the cell count in the submitted container is insufficient, the test may be impossible.</p>		

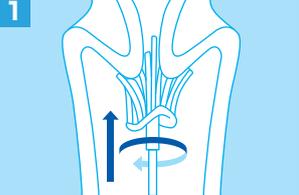
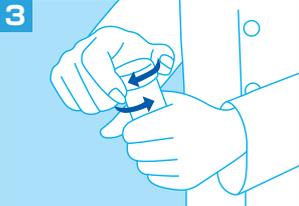
# container handling method

CONTAINER FORM	TEST NAME	SAMPLE HANDLING METHOD
<p style="text-align: center;"> <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">V10</span>            Previous container symbol  <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">V</span> </p>  <p>Dedicated container for viruses Containing the preservation solution</p> <p>Storage conditions: Refrigeration</p> <p>Shelf-life: 6 months</p>	<p>Viruses isolation</p>	<p style="text-align: center;">STORE TEMPERATURE</p> <ul style="list-style-type: none"> <li>● <b>Swab of affected area, vesicle fluid, stool, etc.</b> Wipe affected area with a sterile cotton swab. Transfer the specimen into a container with virus preservation solution according to the methods shown in the figures below. Then, refrigerate the specimen.</li> </ul> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Rub the swab head against the interior wall of the container.</p>  </div> <div style="text-align: center;"> <p>Withdraw the cotton swab.</p>  </div> <div style="text-align: center;"> <p>Firmly tighten the cap of the container, and submit the specimen under refrigerated conditions.</p>  </div> </div> <p style="text-align: center;">Preservation solution for viruses</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p><b>Stool</b> Stick the swab into the stool several times. Roll the swab over the surface of the stool.</p>  </div>
	<p>Viruses identification</p>	<p style="text-align: center;">R</p> <ul style="list-style-type: none"> <li>● <b>Urine, cerebrospinal fluid, pleural fluid, nasal discharge, etc.</b> Collect a specimen of an equivalent volume to the virus preservation solution according to the method shown in figures below, and refrigerate the specimen.</li> </ul> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; width: 30%;"> <p>A liquid specimen (e.g., urine) should be mixed with an equivalent volume of virus preservation solution. Even if a specimen volume is lower than that of the preservation solution, do not discard the preservation solution, and transfer as much specimen as possible to the container.</p> </div> <div style="text-align: center;">  </div> <div style="text-align: center;"> <p>Firmly tighten the cap of the container, and submit the specimen under refrigerated conditions.</p>  </div> </div> <ul style="list-style-type: none"> <li>● <b>Tissues</b> Collect a small piece of tissue specimen (about 5 mm cube), and place it into the virus preservation solution. Then, refrigerate the specimen.</li> </ul>

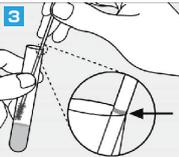
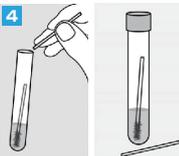
# container handling method

CONTAINER FORM	TEST NAME		STORE TEMPERATURE
<p><b>V30</b> Previous container symbol</p> <p><b>W1</b></p>  <p>Storage conditions: Room temperature</p> <p>Shelf-life: 1 year</p>	<p><b>Herpes simplex virus specific antigen</b> <b>Varicella-zoster virus antigen</b></p> <p>● <b>SAMPLING METHOD</b> Conduct sampling which enables to collect abundant focal basal cells. Early-stage vesicle is optimal as specimen. Vesicle fluid and pus are inappropriate as specimen.</p> <ol style="list-style-type: none"> <li>(1) Peel upper surface or crust with a sterile needle. (Figure 1)</li> <li>(2) Remove upper surface which covers the focal site with forceps etc. (Figure 2)</li> <li>(3) Moisten the cotton swab with physiological saline.</li> <li>(4) Wipe vigorously the entire basal area since cells infected with viruses exist in this area. (Figure 3)</li> </ol> <p>● <b>Note</b> Wipe out pus with a cotton swab if any, and collect specimen with other cotton swab. While applying this procedure, make sure not to make a mess of basal cells.</p> <p>● <b>Procedures</b></p> <p>● <b>Sample smearing</b></p> <ol style="list-style-type: none"> <li>(1) Smear sample on the two circles of the glass slide, rotating a cotton swab. While this procedure, place the cotton swab paralleled to the glass slide to smear the entire area of the swab. Pay attention not to smear disproportionately. (Figure 4)</li> <li>(2) Make sure to check the uniform distribution of the specimen before discarding a cotton swab. Uniform distribution provides opaque view. If there is any transparent area, smear on this area again with a cotton swab placed parallel.</li> <li>(3) Then apply air dry.</li> <li>(4) Add sufficient amount of acetone (enable to be distributed to the entire specimen) on the dried glass slide, then make it evaporated.</li> </ol> <p>• Submit two glass slides containing specimen.</p> <p>● <b>Sample storing</b> The completely dried glass slides should be kept in an object case with the smeared surface down and cryopreserved after writing down the test name, hospital name, and subject name.</p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="347 878 603 1039"> <p>Figure 1</p>  </div> <div data-bbox="609 878 865 1039"> <p>Figure 2</p>  </div> <div data-bbox="871 878 1126 1039"> <p>Figure 3</p>  <p>Basal cells</p> </div> <div data-bbox="1133 878 1388 1039"> <p>Figure 4</p>  </div> </div>		<p><b>F</b></p>

# container handling method

CONTAINER FORM	TEST NAME	STORE TEMPERATURE	SAMPLING METHOD
<p><b>V41</b> Previous container symbol</p> <p><b>f6</b></p>  <p>Additives: Methanol 55%</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 1 year and 6 months</p>	<p>Human papillomavirus DNA (genotypes 16, 18, and other high-risk groups)</p>		<p><b>1</b></p>  <p>(1) Collect cervical cells Collect cells using an instrument other than cotton swab (e.g., brush, spatula).</p>
	<p>Human papillomavirus DNA (high-risk group) (LBC)</p>		<p><b>2</b></p>  <p>(2) Release cells Place the sampling device into the container, and rinse the sampling device by pushing the broom into the bottom of the container 10 times, forcing the bristles apart. Then, swirl the broom vigorously to further release the collected cells.</p>
	<p>Human papillomavirus (HPV) genotyping</p>	<p><b>R</b></p>	<p><b>3</b></p>  <p>(3) Tighten the cap Remove the sampling device, and tighten the cap so that pass the black line the container to the left side. Store the specimen at room temperature. (Note) Do not leave any part of the sampling device in the container.</p>
	<p>Cytodiagnosis (Gynecologic LBC, Bethesda system)</p>		<p><b>[Note]</b> When collecting cells from pregnant women, use cotton swab instead of brush or spatula in consideration of the safety. To collect the necessary amount of cells for the test with cotton swabs, remove mucus with a cotton swab in advance, and use another cotton swab for collecting cells. After collection, thoroughly rinse the cotton swab used for the collection in the preservation solution to release the cells. Do not leave any part of the cotton swab in the container. Please note that the swab shaft may be broken if an excessive force is applied to the shaft.</p>
	<p>Cytodiagnosis (Gynecologic LBC)</p>		

# container handling method

CONTAINER FORM	TEST NAME	STORE TEMPERATURE	SAMPLING METHOD	
<p style="text-align: center;"> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">V50</span>                      Previous container symbol  <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">F3</span> </p>  <p>                         Additives: Guanidine hydrochloride                          Storage conditions: Room temperature                          Shelf-life: 1 year                     </p>	<p><b>Chlamydia trachomatis DNA</b></p>			<p>Remove excess mucus from the cervical canal and the surroundings using the dry swab attached in the swab sampling kit. Discard this swab.</p>
	<p><b>Neisseria gonorrhoeae DNA</b></p>			<p>Insert the attached FLOQSwabs into the cervical canal. Gently rotate the swab towards the same direction for 5 rounds, and withdraw the swab carefully while avoiding any contact with the vaginal mucus.</p>
	<p><b>Simultaneous identification of DNA of N. gonorrhoeae and C. trachomatis</b></p>	R		<p>Open the cap of the dedicated container, and carefully place the FLOQSwabs into the container while avoiding immersing the tip of the swab in the container solution. Align the score line of the swab shaft with the top edge of the container.</p>
	<p><b>Detection of Trichomonas vaginalis (TV) and Mycoplasma genitalium (MG) DNA</b></p>			<p>Break the FLOQSwabs shaft using the edge of the dedicated container, and discard the top portion of the swab shaft. Firmly tighten the cap of the dedicated container, and submit the specimen under room temperature.</p>

## CONTAINER FORM

**V60**

Previous container symbol

**W3**

Additives: Preservation solution

Storage conditions: Room temperature

Shelf-life: 3 years



For general use



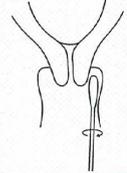
For pregnant women

Human papillomavirus DNA (high-risk group, low-risk group)

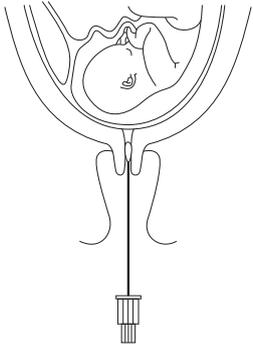
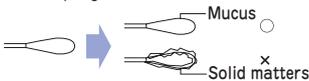
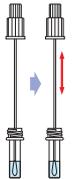
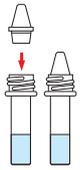
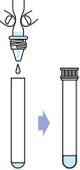
**[Note]** Please note that the swab shaft may be broken if an excessive force is applied to the shaft while collecting sample.

# container handling method

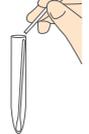
CONTAINER FORM	CONTAINER FORM
<p><b>VP0</b> Pathology container</p> <p>Previous container symbol <b>u5</b></p>  <p>Fill the container with 20% formalin solution.</p> <p>Storage conditions: Room temperature</p>	<p><b>VP1</b> Preparation kit for frozen tissue specimens</p> <p>Previous container symbol <b>u1</b></p>  <p>Storage conditions: Room temperature</p> <p>Shelf-life: 1 year</p>

CONTAINER FORM	TEST NAME	STORE TEMPERATURE	SAMPLING METHOD	
<p><b>VP5</b></p> <p>Previous container symbol <b>W5</b></p>  <p>Additives: Extraction buffer</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 1 year</p>	<p>Human oncofetal fibronectin</p>	<p>F</p>		<p>Insert a dedicated cotton swab into the posterior vaginal vault, and rotate the swab about 10 seconds to allow it to absorb secretions.</p> <p>* Do not rub the vaginal surface vigorously.</p> <p>* Avoid any mucus from being contained into the specimen.</p>
				<p>Remove the purple cap of the specimen extraction container. Immerse the secretion-containing swab in the extraction buffer, and swirl the swab 5 times. (Do not spill the contents of the container.)</p>
				<p>Take out the cotton swab from the specimen extraction container.</p>
				<p>Attach a specimen filter to the specimen extraction container.</p>
			 <p>Specimen for assay</p>	<p>Drop all of the specimen extract into the specimen storage tube. Close the cap of the tube, and be sure to freeze it.</p>
<p><b>● Points to note</b></p> <ul style="list-style-type: none"> <li>• Collect specimen before washing the vagina.</li> <li>• If sperm are contained in a specimen, do not use it.</li> <li>• If <math>\geq 0.1\%</math> of blood is contained in a specimen, accurate results may not be obtained.</li> <li>• Collect specimen from the posterior vaginal vault.</li> <li>• Avoid rubbing the vaginal surface vigorously.</li> </ul>				

# container handling method

CONTAINER FORM	TEST NAME		STORE TEMPERATURE
<p><b>VP6</b> Previous container symbol <b>W6</b></p>  <p>Additives: Extraction buffer (Phosphate buffer)</p> <p>Storage conditions: Room temperature (Refrigeration for the extraction buffer)</p> <p>Shelf-life: 1 year</p>	<b>Granulocyte elastase in cervical mucus</b>		<b>F</b>
	<b>SAMPLING METHOD</b>		
	<p><b>Correct site for collecting specimen</b></p> 	<p>Gently remove excess mucus from the vaginal area using a swab.</p>	<p><b>Points to note</b></p> <ol style="list-style-type: none"> <li>1) Collect specimen from the endocervical canal.</li> <li>2) Collect specimen before washing the vagina.</li> <li>3) Insert the swab while avoiding contact with anything, such as secretion or mucus around the external os, till it reaches the endocervical canal.</li> <li>4) Each rotation should take about 5 seconds to allow the swab to absorb mucus. If a small amount of solid matters are attached to the swab, remove them with tweezers.</li> </ol> <p>&lt;Before sampling&gt; &lt;After sampling&gt;</p>  <p>5) Start extraction procedures of the collected specimen within 15 minutes.</p> <p><b>[Note]</b> Please note that the swab shaft may be broken if an excessive force is applied to the shaft while collecting specimen.</p>
		<p>Insert the specimen collection swab into the endocervical canal. Note 3)</p>	
		<p>Gently rotate the swab twice to obtain cervical mucus. Note 4)</p>	
<b>Extraction methods</b>			
<p>(1) </p> <p>Unscrew the blue cap of the extraction container with the extraction buffer.</p>	<p>(2) </p> <p>Place the cotton swab with the collected cervical mucus in the container, and allow to stand for 2 to 3 minutes. Then, shake the swab in an up-and-down direction for 20 to 30 times to extract the specimen.</p>	<p>(3) </p> <p>Squeeze the cotton swab by each container with fingers to release the specimen extract and remove the swab.</p>	
<p>(4) </p> <p>Set the filter.</p>	<p>(5) </p> <p>Filter the specimen extract into the specimen storage container. Apply only one pressure to the extraction container to obtain 5 to 7 drops (about 300 μL) of the extract. If the required amount of extract is not obtained, start the procedure all over again from specimen collection. Seal the specimen storage container with the white cap, and store it. Specimens should be tested within 3 days when refrigerated (8°C) and within 3 months when frozen (≤-15°C).</p>		

CONTAINER FORM	TEST NAME		STORE TEMPERATURE	
<p><b>VS4</b> Previous container symbol <b>k9</b></p>  <p>Storage conditions: Room temperature</p> <p>Shelf-life: 5 years</p>	<b>Bordetella pertussis DNA</b>		<b>F</b>	
	<b>SAMPLING METHOD</b>			
	1. Take out a swab by holding the shaft. Do not touch the cotton part.			
		2. Hold the patient's head so as to stay still, and gently insert the swab into the postnasal space to collect mucus.		
		3. Withdraw the swab, and promptly insert the swab into the sterile polyethylene test tube (ARR). Align the slit score line of the swab shaft with the top edge of the container, and break the shaft.		
	4. Close the cap firmly while the swab is included in the container. Submit the specimen under frozen conditions.			

# container handling method

CONTAINER FORM		TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD	
<p><b>X00</b> Previous container symbol</p> <p><b>ℓ</b></p> 	<p>Sterile sputum collection container</p> <p>Storage conditions: Room temperature</p>	Nucleic acid identification of <i>M. tuberculosis</i> complex, TRC	sputum 2.0 each			<p><b>R</b></p> <p>In this method, a result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples.</p>	
		Nucleic acid identification of MAC, Real-time TRC					
		Pneumocystis carinii ( <i>P. jirovecii</i> ) DNA					
			Mycoplasma pneumoniae DNA	sputum 1.0			<p><b>F</b></p> <p>Avoid putting in another request at the same time. In this method, a result is affected proportionally to the degree of contamination. Therefore, pay careful attention when collecting and handling samples.</p>
			Legionella DNA, qualitative				

## CONTAINER FORM

<p><b>X10</b> Previous container symbol</p> <p><b>f</b></p>	<p>Cytodiagnosis, sputum cell concentrations</p> <p>Additives: Saccomanno's solution, mucolytic agent</p> <p>Storage conditions: Room temperature (cold and dark place)</p> <p>Shelf-life: 1 year</p>	
---	---	--

## CONTAINER FORM

<p><b>X90</b> Previous container symbol</p> <p><b>L7</b></p>	<p>Nucleic acid container [GM container]</p> <p>Contents Nucleic acid protector</p> <p>Storage conditions: Room temperature</p> <p>Shelf-life: 1 year from manufacturing date</p>	
<p>Lung cancer compact panel CDx / Lung cancer compact panel for research</p>		

# container handling method

## CONTAINER FORM

**XC0**

Storage conditions: Room temperature

Previous container symbol

**L2**



Dedicated container for calculi

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD	
<p><b>XR4</b></p> <p>Previous container symbol</p> <p><b>L4</b></p> 	Storage conditions: Room temperature		CSF 1.0	F	Collect sample in a container shown in the left image, and freeze immediately. Place the specimen into the container set (Z50), and be sure to store frozen.	
	Shelf-life: 4 years	Cochlin-tomoprotein (CTP)	auris media wash solution 0.3		Collect sample in a container shown in the left image, and be sure to freeze.	
CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD	
<p><b>XR5</b></p> <p>Previous container symbol</p> <p><b>L6</b></p> 	CSF container		CSF 2.5 each	R	Obtain CSF into a container shown in the left image and please be sure to refrigerate the specimen.	
	Storage conditions: Room temperature	$\beta$ -Amyloid 1-42/1-40 ratio				
	Shelf-life: 4 years	Phosphorylated tau protein				
	Tau protein, total (AD)					

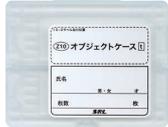
# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD	
<p><b>Z10</b> Previous container symbol</p> <p><b>t</b></p>  <p>[Object cases] Preparation (slide glass)</p> <p>Storage conditions: Room temperature</p>	Nasal eosinophils		nasal discharge smear 2-3 slides		Prepare smears with fresh nasal discharge, and submit. Store at room temperature.	
	BRAF exon15 V600E (SEQ)		unstained slides • For tumor site confirmation Section thickness 3.4 μm: 2 slides each		Prepare unstained slide, and write section thickness on the front side of the slide. Place the slides into an object case shown in the left image, and submit under room temperature. When ordering any of the three tests in the left (regardless of the number of tests ordered at the same time), make sure to also place an order of "Tumor site confirmation test(code No. A910 1)" as well.	
	PIK3CA mutation analysis, SEQ		• For DNA extraction Section thickness 10 μm: 5-10 slides each			
	c-kit mutation analysis (GIST)					
	General cytodiagnosis (sputum)			wet-fixed 2 smears		Prepare stained smear slides. Place the slides in an object case shown in the left image, and submit under room temperature.
	General cytodiagnosis (other specimens than sputum)			smears (wet-fixed 1 slide, dry-fixed 1 slide)		
	Cytodiagnosis (Gynecology, Bethesda system)			wet-fixed smear 1 slide each		
	Cytodiagnosis (Gynecology)					
	Stained specimen preparation					
	CD30(IHC)			unstained 2 slides each	<b>R</b>	Please thinly slice the tissue into 3 to 4 μm, use coated slides such as silanized slides, and apply it within 50 mm from the edge of the glass slide.
	Malignant lymphoma ALK protein, IHC					
	Breast cancer HER2 protein, IHC, 4B5			unstained 4 slides each		Use coated slides such as silanized slides, and leave thinly-sliced samples to dry overnight at about 40°C before submitting them. For drying at high temperature, we recommend processing within 30 minutes at 60°C. Please avoid leaving it in high temperature for a long time. Specimens that have undergone decalcification cannot be requested because correct results cannot be obtained. Fixation time is within 6 to 72 hours in 10% neutral buffered formalin (for biopsy specimens, it depends on the size of the specimen.) is desirable. Thinly slice the tissue into 4 μm and apply it onto the slide at around the center.
Breast cancer PD-L1 protein, IHC, 22C3					Use coated slides such as silanized slides, and leave thinly-sliced samples to dry overnight at about 40°C before submitting them. Slice the tissue to the thickness of 4-5 μm, and apply it onto the slide at around the center.	
Breast cancer PD-L1 protein, IHC, SP142						

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>Z10</b> Previous container symbol</p> <p><b>t</b></p>  <p>[Object cases] Preparation (slide glass)</p> <p>Storage conditions: Room temperature</p>	<p><b>Gastric cancer HER2 gene, FISH</b></p>				<p>Use coated slides such as silanized slides, and leave thinly-sliced samples to dry overnight at about 40°C before promptly submitting them. In the case of baking for the purpose of preventing tissues from coming off, treat them in as short a time as possible (less than 1 hour), and avoid leaving the glass slides at high temperatures for any duration longer than that. Fixation time is 6 to 72 hours in 10% neutral buffered formalin (depending on the size of specimens for biopsy samples with at least 6 hours fixation for biopsy specimens. However, the fixation time should be at least 6 hours). Prepare thin slices of tissue sections 4 to 6 μm in thickness.</p>
	<p><b>Gastric cancer HER2 protein, IHC</b></p>				<p>Use coated slides such as silanized slides, and leave thinly-sliced samples to dry overnight at about 40°C before promptly submitting them. In the case of baking for the purpose of preventing tissues from coming off, treat them in as short a time as possible (less than 1 hour), and avoid leaving the glass slides at high temperatures for any duration longer than that. Fixation time is 6 to 72 hours in 10% neutral buffered formalin (depending on the size of specimens for biopsy samples with at least 6 hours fixation for biopsy specimens. However, the fixation time should be at least 6 hours). Prepare thin slices of tissue sections 3 to 4 μm in thickness.</p>
	<p><b>Gastric cancer PD-L1 protein, IHC, 28-8</b></p>				<p>Use coated slides such as silanized slides, and leave thinly-sliced samples to dry overnight at about 40°C before promptly submitting them. Slice the tissue to the thickness of 4-5 μm, and apply it onto the slide at around the center.</p>
	<p><b>Colorectal cancer HER2 gene, FISH</b></p>		<p>unstained 4 slides each</p>	<p><b>R</b></p>	<p>Use coated slides such as silanized slides, and leave thinly-sliced samples to dry overnight at about 40°C before promptly submitting them. In the case of baking for the purpose of preventing tissues from coming off, treat them in as short a time as possible (less than 1 hour), and avoid leaving the glass slides at high temperatures for any duration longer than that. Fixation time is 6 to 72 hours in 10% neutral buffered formalin (depending on the size of specimens for biopsy samples with at least 6 hours fixation for biopsy specimens. However, the fixation time should be at least 6 hours). Prepare thin slices of tissue sections 4 to 6 μm in thickness.</p>
	<p><b>Colorectal cancer HER2 protein, IHC</b></p>				<p>Use coated slides such as silanized slides, and leave thinly-sliced samples to dry overnight at about 40°C before promptly submitting them. In the case of baking for the purpose of preventing tissues from coming off, treat them in as short a time as possible (less than 1 hour), and avoid leaving the glass slides at high temperatures for any duration longer than that. Fixation time is 6 to 72 hours in 10% neutral buffered formalin (depending on the size of specimens for biopsy samples with at least 6 hours fixation for biopsy specimens. However, the fixation time should be at least 6 hours). Prepare thin slices of tissue sections 3 to 4 μm in thickness.</p>
<p><b>Esophageal cancer PD-L1 protein, IHC, 22C3</b></p>		<p>Use coated slides such as silanized slides, and leave thinly-sliced samples to dry overnight at about 40°C before promptly submitting them. Slice the tissue to the thickness of 4-5 μm, and apply it onto the slide at around the center.</p>			

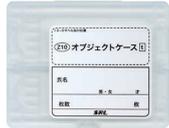
# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD	
<p><b>Z10</b> Previous container symbol</p> <p><b>t</b></p>  <p>[Object cases] Preparation (slide glass)</p> <p>Storage conditions: Room temperature</p>	<b>Esophageal cancer PD-L1 protein, IHC, 28-8</b>	unstained 4 slides each			Use coated slides such as silanized slides, and leave thinly-sliced samples to dry overnight at about 40°C before submitting them. Slice the tissue to the thickness of 4-5 μm, and apply it onto the slide at around the center.	
	<b>Uterine cervical cancer PD-L1 protein, IHC, 22C3</b>				<b>MMR protein, IHC</b> <b>MMR protein, IHC (Lynch syndrome)</b>	unstained 9 slides each
	<b>BRAF V600E protein, IHC</b>	unstained 4 slides each		R	Use coated slides such as silanized slides, and leave thinly-sliced samples to dry overnight at about 40°C before submitting them. Thinly slice the tissue into 4 to 5 μm and apply it onto the slide at around the center, ≥ 15 mm from the frosted edge and ≥ 15 mm from the slide glass edge.	
	<b>Lung cancer, PD-L1 protein, IHC, 22C3</b>				Use coated slides such as silanized slides, and leave thinly-sliced samples to dry overnight at about 40°C before submitting them. Slice the tissue to the thickness of 4-5 μm, and apply it onto the slide at around the center.	
	<b>Lung cancer, PD-L1 protein, IHC, 28-8</b>				Use coated slides such as silanized slides, and leave thinly-sliced samples to dry overnight at about 40°C before submitting them. Prepare thin slices of tissue sections 4 μm in thickness. Place the section onto the slide at around the center. After drying at 37°C for 24 hours, submit the slides.	
	<b>Lung cancer, PD-L1 protein, IHC, SP142</b>				Use coated slides such as silanized slides, and leave thinly-sliced samples to dry overnight at about 40°C before submitting them. Prepare thin slices of tissue sections 4 to 6 μm in thickness. In the case of baking for the purpose of preventing tissues from coming off, treat them for about 2 to 24 hours.	
	<b>Lung cancer PD-L1 protein, IHC, SP263</b>					
	<b>Lung cancer ALK protein, Highly sensitive IHC</b>					
	<b>Lung cancer ALK protein, (IHC) D5F3</b>					
	<b>Lung cancer ALK gene, FISH</b>					

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>Z10</b> Previous container symbol</p> <p><b>t</b></p>  <p>[Object cases] Preparation (slide glass)</p> <p>Storage conditions: Room temperature</p>	<p><b>Melanoma PD-L1 protein, (IHC)28-8</b></p>				<p>Use coated slides such as silanized slides, and leave thinly-sliced samples to dry overnight at about 40°C before submitting them. Thinly slice the tissue into 4 to 5 μm and apply it onto the slide at the center, ≥ 15 mm from the frosted edge and ≥ 15 mm from the slide glass edge.</p>
	<p><b>Head and neck cancer PD-L1 protein, IHC, 22C3</b></p>		<p>unstained 4 slides each</p>		<p>Use coated slides such as silanized slides, and leave thinly-sliced samples to dry overnight at about 40°C before submitting them. Slice the tissue to the thickness of 4-5 μm, and apply it onto the slide at around the center.</p>
	<p><b>Head and neck cancer PD-L1 protein, (IHC) 28-8</b></p>			<p><b>R</b></p>	<p>Use coated slides such as silanized slides, and leave thinly-sliced samples to dry overnight at about 40°C before submitting them. Thinly slice the tissue into 4 to 5 μm and apply it onto the slide at the center, ≥ 15 mm from the frosted edge and ≥ 15 mm from the slide glass edge.</p>
	<p><b>CCR4 protein, IHC</b></p>		<p>6 unstained slides</p>		<p>For a testing material, provide unstained slides prepared using paraffin blocks that have been fixed in 10-20% neutral buffered formalin fixative for about 24 to 48 hours before embedding. Thinly slice the samples into 3 to 4 μm, use coated slides such as silanized slides, and leave thinly-sliced samples to dry overnight at about 40°C before submitting them.</p>

# container handling method

Points to note concerning the submission of samples for gene-related tests.

CONTAINER FORM		TEST NAME	UNSTAINED SLIDE (NUMBER)	THICKNESS ( $\mu\text{m}$ )	RATE OF TUMOR CELL	GENE TEMPERATURE
<p><b>Z10</b> Previous container symbol</p> <p><b>t</b></p>  <p>[Object cases] Preparation (slide glass)</p> <p>Storage conditions: Room temperature</p>		EZH2 gene mutational analysis	5	5	$\geq 15\%$	
		BRAF V600 mutation analysis, PCR	5-10	10	$\geq 50\%$	
		EGFR mutation analysis v2.0	5-10	10	$\geq 10\%$	
		EGFR gene mutational analysis (Scorpion-ARMS technique)	5-10	5-10	$\geq 10\%$	
		Qualitative detection of ROS1 gene fusions (FFPE)	5	5	$\geq 30\%$	R
		ArcherMETex14 skipping, FFPE	5-10	5	$\geq 10\%$	
		KRAS G12C mutational analysis	5	5	$\geq 20\%$	
		IDH1/2 gene analysis (Glioma) (FFPE)	5-10	4-10	$\geq 20\%$	
		RAS/BRAF gene mutational analysis	5	5-10	$\geq 10\%$	

## COLLECTING METHOD

### ●Condition for submission

Perform histopathological assessment on unstained sample slides, and confirm that a sufficient proportion of tumor cells are available for the testing.

If the proportion of tumor cells is not sufficient, mark the tumor cell region on the back side of the unstained sample slide.

Please note that submission of unmarked slides leads to impact on the test result (e.g., false negativity) due to inability to perform micro-dissection.

For microsatellite instability (MSI) test (FFPE) and microsatellite instability (MSI) test (Lynch syndrome), tumor part and normal part must be distinguished because of the characteristics of the test. Be sure to mark the tumor cell region.

However, FoundationOne CDx Cancer genome profile and myChoice diagnostic system are not included.

### ●Unstained sample slide

Immediately immerse the collected tissue in 10% formalin neutral buffer solution for fixation (recommended duration of fixation: 6-48 hours. It takes 18-36 hours for surgical material of ArcherMETex14 skipping (FFPE); 6-72 hours for myChoice diagnostic system; and 3-6 hours for biopsy specimen).

Wherever possible, continuously slice the formalin fixed and paraffin embedded (FFPE) block produced in the past 3 years at a designated thickness to prepare serial sections. However, the AmoyDx Lung Cancer Multipanel should be submitted with FFPE tissue prepared within 3 months, 3 to 12 months, and 12 to 24 months, respectively.

For submission, pay thorough precaution against contamination by changing microtome blades for each specimen.

The DNA has undergone fragmentation due to formalin-fixed tissues. Therefore, please note that an analysis may not be possible depending on the conditions and period of storage, as well as the type and composition of a fixing solution and fixation time.

### ●Biopsy sample

Make sure to handle biopsy specimen with special care as only a trace amount of specimen is extracted, and in some cases most tissues may not be present, or they may not include tumor cells.

# container handling method

Points to note concerning the submission of samples for gene-related tests.

CONTAINER FORM	TEST NAME	UNSTAINED SLIDE (NUMBER)	THICKNESS (μm)	RATE OF TUMOR CELL	STAIN TEMPERATURE
<p><b>Z10</b> Previous container symbol</p> <p><b>t</b></p>  <p>[Object cases] Preparation (slide glass)</p> <p>Storage conditions: Room temperature</p>	Microsatellite instability (MSI) test (FFPE)	5-10	5	≥ 50%	
	Oncomine Dx Target Test Multi-CDx (FFPE)	5-10	5	≥ 30%	
	OncomineDxTT Multi-CDx (thyroid cancer) FFPE	5-10	5	≥ 30%	
	Oncomine Dx Target Test Multi-for research 46genes analysis (FFPE)	5-10	5	≥ 30%	
	OncomineDxTT Multi-for research (thyroid cancer) FFPE	5-10	5	≥ 30%	
	AmoyDx Lung Cancer Multipanel IVD Specimen storage period: (less than 3 months, 3-12 months, 12-24 months)	7-10 each	5 each	≥ 20% (recommended ≥ 30%)	R
	AmoyDx Lung Cancer Multipanel for research Specimen storage period: (less than 3 months, 3-12 months, 12-24 months)	7-10 each	5 each	≥ 20% (recommended ≥ 30%)	
	Lung cancer compact panel CDx	5-10	5	≥ 10%	
	Lung cancer compact panel for research	5-10	5	≥ 10%	
	NCC Oncopanel System	5	10	≥ 20%	R
	FoundationOne CDx Cancer genome profile	10	4-5	≥ 30%	
	myChoice diagnostic system	8	5	≥ 20%	R
	Microsatellite instability (MSI) test (Lynch syndrome)	5-10	5	≥ 50%	

## COLLECTING METHOD

### ●Condition for submission

Perform histopathological assessment on unstained sample slides, and confirm that a sufficient proportion of tumor cells are available for the testing.

If the proportion of tumor cells is not sufficient, mark the tumor cell region on the back side of the unstained sample slide.

Please note that submission of unmarked slides leads to impact on the test result (e.g., false negativity) due to inability to perform micro-dissection.

For microsatellite instability (MSI) test (FFPE) and microsatellite instability (MSI) test (Lynch syndrome), tumor part and normal part must be distinguished because of the characteristics of the test. Be sure to mark the tumor cell region.

However, FoundationOne CDx Cancer genome profile and myChoice diagnostic system are not included.

### ●Unstained sample slide

Immediately immerse the collected tissue in 10% formalin neutral buffer solution for fixation (recommended duration of fixation: 6-48 hours It takes 18-36 hours for surgical material of ArcherMETex14 skipping (FFPE); 6-72 hours for myChoice diagnostic system; and 3-6 hours for biopsy specimen).

Wherever possible, continuously slice the formalin fixed and paraffin embedded (FFPE) block produced in the past 3 years at a designated thickness to prepare serial sections. However, the AmoyDx Lung Cancer Multipanel should be submitted with FFPE tissue prepared within 3 months, 3 to 12 months, and 12 to 24 months, respectively.

For submission, pay thorough precaution against contamination by changing microtome blades for each specimen.

The DNA has undergone fragmentation due to formalin-fixed tissues. Therefore, please note that an analysis may not be possible depending on the conditions and period of storage, as well as the type and composition of a fixing solution and fixation time.

### ●Biopsy sample

Make sure to handle biopsy specimen with special care as only a trace amount of specimen is extracted, and in some cases most tissues may not be present, or they may not include tumor cells.

# container handling method

CONTAINER FORM	TEST NAME	AMOUNT COLLECTED (mL)	AMOUNT SUBMITTED (mL)	STORE TEMPERATURE	SAMPLE HANDLING METHOD
<p><b>Z15</b> Previous container symbol <b>t5</b></p>  <p>OncotypeDX Kit Box Storage conditions: Room temperature</p>	<p>OncotypeDX DCIS</p> <hr/> <p>OncotypeDX Colon</p>	<p>15 slides in total (Refer to Preparing HE stained and unstained sample slides)</p>		<p><b>R</b></p>	<p>(1) Please select the most representative tumor block.                      (2) Thinly slice 15 tissue sections of 5 <math>\mu</math>m thickness for RNA extraction.                      (3) When picking up the tissue sections, arrange them so that they are all in the same directions.                      (4) Leave the sections that have been picked up to dry naturally, avoid paraffin melting.                      (5) Please be sure to enter your facility's specimen control number (any alphanumeric number) on the slide.                      ※Specimen control numbers should be assigned by your facility. Please enter the same specimen control number on each slide.                      (6) Please be sure to write the sequence numbers 1 through 15 on the slides in the order the sections were sliced off.                      (7) Attach the barcode attached to the OncotypeDX Kit Box to each slide.                      ※When preparing samples, please take the following precautions to avoid contamination:                      · Replace the microtome blades (or new blades) for every sample.                      · Use clean water when picking up the sections.                      · When slicing off thin sections, do not handle samples with bare hands but use disposable gloves.</p>

## CONTAINER FORM

**Z50** Storage conditions: Room temperature  
Previous container symbol  
**L5**



Container set