



KDL –

Specimen Collection Solution

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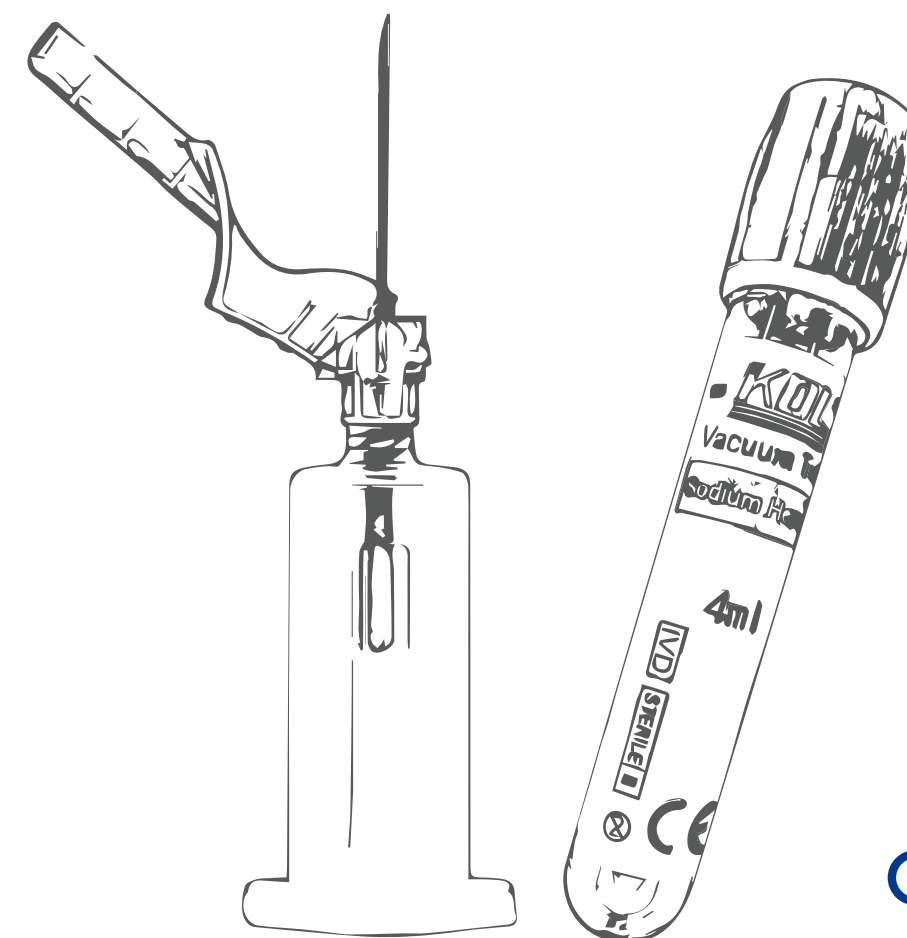
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2025 Version



About Kindly (KDL) Group

Established in 1987, Kindly (KDL) Group specializes in the manufacturing, research and development, sales, and trade of medical puncture devices. As an industry leader, KDL Group was the first company in China's medical device sector to pass the CMDC certification in 1998. It also obtained the EU TÜV certification and successfully passed the U.S. FDA on-site audit.

With over 30 years of excellence, KDL Group was listed on the main board of the Shanghai Stock Exchange in 2016 (Stock Code: SH603987). Today, it operates over 66 wholly-owned and majority-owned subsidiaries across Central, Southern, Eastern, and Northern China.

Comprehensive Product and Service Offering

Guided by its core policy, “Concentrating on the Development of Medical Puncture Devices,” KDL Group has built a diversified and professional business portfolio. Its offerings span advanced medical products and services, including: Syringes and Needles, Tubings and IV Infusion Systems, Diabetes Care Solutions, Interventional Devices, Pharmaceutical Packaging, Aesthetic and Veterinary Medical Devices, Specimen Collection Systems, Active Medical Devices.

Market Leadership

KDL Group is recognized as one of China's leading manufacturers with a comprehensive industrial chain in the medical puncture device sector. Its commitment to innovation, quality, and customer-centric solutions has positioned it as a trusted partner in the healthcare industry.



CERTIFICATE OF CONFORMANCE



DABAS
 DEUTSCHE ANTI-BIOLOGISCHE
 ASSOCIATION




 TÜV
 TECHNISCHE ÜBERWACHUNG
 VEREIN

Certificate

No. Q5 036336 0056 Rev.03

Holder of Certificate:

Certification Mark:

Scope of Certificate:

**Zhejiang Kindly Medical
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 TÜV
 TECHNISCHE ÜBERWACHUNG
 VEREIN

Design, Development, Production, Sales and
 Distribution of **Single Non-active Medical Devices (for
 detailed information see attachment)**

The Certification Body of TÜV SÜD Product Service certifies that the company mentioned
 above has established and is maintaining a quality management system, which meets the
 requirements of the British standard, as a possible requirement of the design and certification
 regulation of TÜV SÜD Group to have in the compliance with all details and to fulfill safety
 and other standards according to www.tuv.com/en/products/036336-0056/Rev_03

Report No.:

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 Christoph Dörm
 Head of Certification/Control Body

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VACUUM BLOOD COLLECTION SYSTEM



Availability of Cap Color

Product Categories	Color	Additive	Mixing (times)	Standing time interval (minutes)	Centrifugation time (minutes)	Application
Coagulation Tube		Nothing	5	60-120	10	Serum tubes for biochemistry and immunology tests
		Clot Activator & Gel	8	30-120	10	
		Coagulant	5	30-120	10-15	
Anticoagulant Tube		EDTA.K2	8-10	Can be operated directly on the machine		Routine blood test
		EDTA.K3	8-10			
		Na-Citrate:3.8%	5	10-15	/	Erythrocyte sedimentation test
		Na-Citrate:3.2%	5	/	10-15	Coagulation factor test
		Heparin sodium or heparin lithium	8-10	/	10	Hemorheology, emergency biochemistry test
		Sodium Fluoride Sodium Heparin	8-10	/	5-10	Blood sugar, glucose tolerance test
		K2 EDTA & Gel	5-8	/	10-15	Nucleic acid test
		Anti-coagulant ACD(Acid Citrate Dextrose)	8-10	/	/	HLA tissue typing, paternity test, DNA test
		Lithium Heparin & Gel	8-10	/	10-15	Emergency biochemistry



Inner Wall Treatment Technology

- KDL employs its proprietary "Filming" inner wall treatment technology, which ensures that the inner surface of blood collection tubes is as smooth as the walls of human blood vessels.
- This advanced treatment significantly reduces blood adhesion to the tube and stopper walls, even after centrifugation. As a result, it enhances specimen quality and improves clarity, ensuring more reliable diagnostic outcomes.

Performance Evaluation

Our vacuum blood sampling can fully meet the requirements of clinical application, making it convenient, safe, and reliable to use.



Performance of separation gel and tube

Our blood collection tubes feature high-performance separation gel that ensures rapid and clear separation of serum or plasma from blood cells, minimizing hemolysis and ensuring sample integrity. The gel remains stable across various temperatures and is biologically inert, preventing interference with test results. The tubes are made from high-quality PET and glass material offering durability, clear volume markings, and safety features like secure caps.

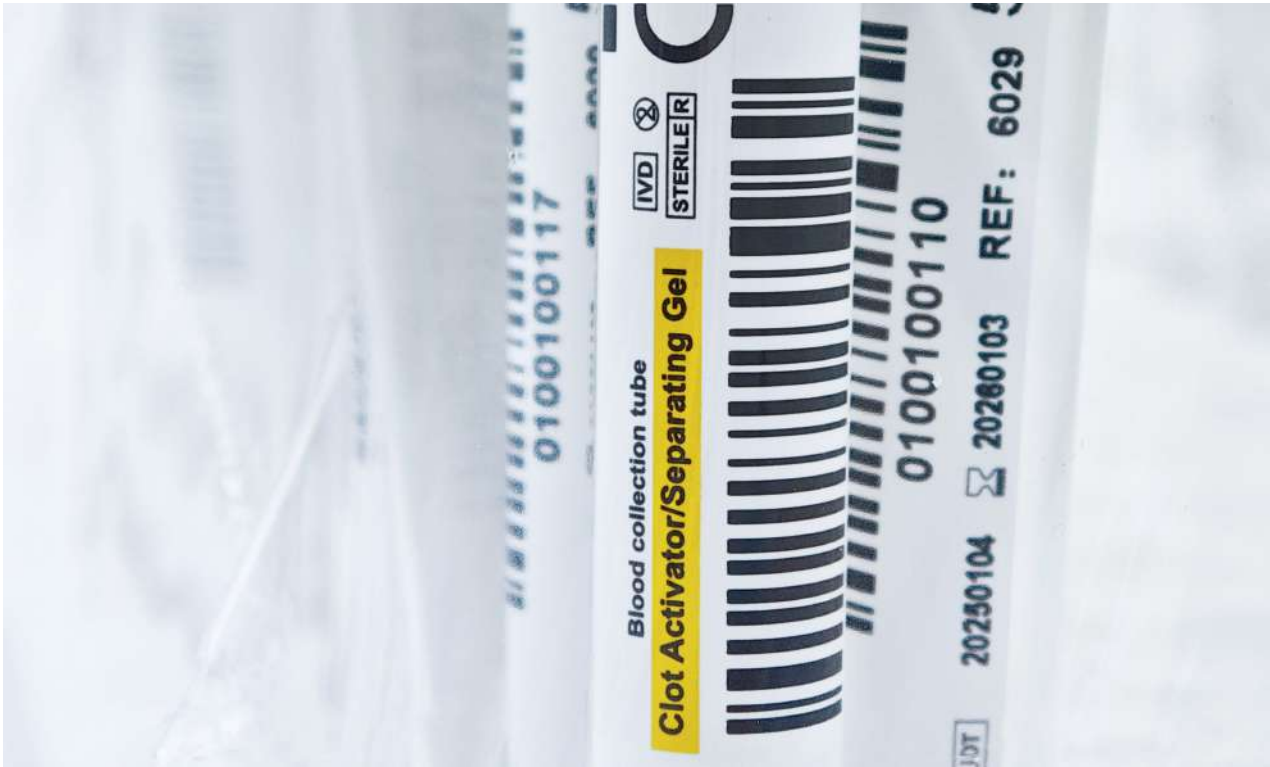


Suction volume accuracy and precision

Our blood collection tubes utilize advanced technology and stringent quality control to ensure precise and consistent sample extraction according to predefined volumes or ratios. This accuracy in measuring patients' blood parameters provides doctors with more reliable diagnostic data, ultimately enhancing patient care outcomes.

Superior anti-glycolytic properties

Our blood collection tubes boast superior anti-glycolytic properties, ensuring accurate glucose measurements. By inhibiting post-collection glucose breakdown, they preserve sample integrity, providing healthcare professionals with reliable data for precise diagnostics and effective patient management.



PRE-BARCODED TUBES:

Feature barcode labels to ensure each sample is accurately matched with specific patient information, enhancing data traceability and streamlining the sample process for more efficient and supportive clinical decision-making.

Serum Clot Activator Tube

Serum clot activator tube is to obtain serum specimen used for serum determinations in chemistry, serology, and immunohematology.

Description

- Silica particles, applied to the inner wall of the tube via ultrasonic spray-drying, serve as an effective clot activator, promoting rapid blood coagulation.
- To activate clotting, gently invert the blood collection tube 5–6 times immediately after blood collection. Allow the tube to stand for 30 minutes or until the clot is fully formed to obtain serum.
- Centrifugation: < 1300g(RCF) for 10 minutes at 18-25°C



Ref.	Volume	Size(mm)	Additive	Material	Cap Color	Label
6013	2ml	13x75	Clot activator	PET	<div><div></div><div></div></div> Safety Cap+Rubber	Paper
6014	3ml	13x75	Clot activator	PET	<div><div></div><div></div></div> Safety Cap+Rubber	Paper
6016	4ml	13x75	Clot activator	PET	<div><div></div><div></div></div> Safety Cap+Rubber	Paper
6018	5ml	13x100	Clot activator	PET	<div><div></div><div></div></div> Safety Cap+Rubber	Paper
6019	6ml	13x100	Clot activator	PET	<div><div></div><div></div></div> Safety Cap+Rubber	Paper
6024	10ml	16x100	Clot activator	PET	<div><div></div><div></div></div> Safety Cap+Rubber	Paper
6662	3ml	13x75	Clot activator	Glass	<div><div></div><div></div></div> Safety Cap+Rubber	Paper
6664	5ml	13x100	Clot activator	Glass	<div><div></div><div></div></div> Safety Cap+Rubber	Paper
6665	6ml	13x100	Clot activator	PET	<div><div></div><div></div></div> Safety Cap+Rubber	Transparent/Paper

Plain Tube

KDL serum tubes could produce (no additive) high quality serum, it doesn't contain clot activator with a gel barrier.

Description

- Plain tubes, free of additives, are ideal for biochemistry, immunology, and serology tests. These tubes naturally facilitate the separation of blood cells and fibrin, yielding intact serum suitable for various laboratory procedures.
- Clotting Time: For serum tubes from patients not undergoing anticoagulant therapy, a minimum coagulation time of 60 minutes is recommended to ensure optimal results.



Ref.	Volume	Size(mm)	Additive	Material	Cap Color	Label
6656	3ml	13x75	No Additive	Glass	<div><div></div><div></div></div> Safety Cap+Rubber	Paper
6657	5ml	13x100	No Additive	Glass	<div><div></div><div></div></div> Safety Cap+Rubber	Paper
6658	6ml	13x100	No Additive	Glass	<div><div></div><div></div></div> Safety Cap+Rubber	Paper
6001	2ml	13x75	No Additive	PET	<div><div></div><div></div></div> Safety Cap+Rubber	Transparent/Paper
6002	3ml	13x75	No Additive	PET	<div><div></div><div></div></div> Safety Cap+Rubber	Transparent/Paper
6005	5ml	13x100	No Additive	PET	<div><div></div><div></div></div> Safety Cap+Rubber	Paper
6006	6ml	13x100	No Additive	PET	<div><div></div><div></div></div> Safety Cap+Rubber	Paper

Coagulation Tubes

KDL coagulation tubes contain a buffered sodium citrate solution and are used for examination of coagulation parameters, The tubes are available with a citrate concentration of 3.2%

Description

- The KDL plastic blood collection tubes feature a double-layer design, based on the water and oxygen barrier properties of different plastic materials.
- This design reduces the water and air permeability of the plastic tubes, effectively extending the storage time and ensuring the accuracy of the vacuum level and the stability of added reagents within the product's shelf life.
- The selection of materials and design of the double-layer plastic tube effectively increases the liquid level, resolves the "dead space" issue, while also preventing the activation of PF4 factors, ensuring accurate test results.



Ref.	Volume	Size(mm)	Additive	Material	Cap Color	Label
6082	2ml	13x75	3.2% Sodium Citrate	PET/PP	● Safety Cap+Rubber	Transparent/Paper
6083	3ml	13x75	3.2% Sodium Citrate	PET/PP	● Safety Cap+Rubber	Transparent/Paper
6088	2ml	13x75	3.2% Sodium Citrate	Glass	● Safety Cap+Rubber	Paper
6089	3ml	13x75	3.2% Sodium Citrate	Glass	● Safety Cap+Rubber	Paper

Heparin Tube

KDL plasma tubes are available with spray-dried sodium heparin or lithium heparin additives, these tubes can be used for clinical chemistry analysis.

Description

- Heparin acts as an anticoagulant by forming an antithrombin complex, which inhibits thrombin and activated factor X, thus preventing coagulation.
- KDL plasma tubes with lithium heparin are treated with a special spray-drying process that evenly distributes the additive on the inner surface of the tube, ensuring optimal solubility and effectiveness.
- Lithium heparin does not interfere with ion detection during testing, including sodium ion measurements.
- Immediately after blood collection, gently invert the tube 8–10 times to activate the anticoagulant effectively.



Ref.	Volume	Size(mm)	Additive	Material	Cap Color	Label
6102	3ml	13x75	Sodium Heparin	PET	● Safety Cap+Rubber	Paper
6104	4ml	13x75	Sodium Heparin	PET	● Safety Cap+Rubber	Paper
6106	5ml	13x100	Sodium Heparin	PET	● Safety Cap+Rubber	Paper
6108	6ml	13x100	Sodium Heparin	PET	● Safety Cap+Rubber	Paper
6696	3ml	13x75	Sodium Heparin	Glass	● Safety Cap+Rubber	Paper
6697	4ml	13x75	Sodium Heparin	Glass	● Safety Cap+Rubber	Paper
6698	5ml	13x100	Sodium Heparin	Glass	● Safety Cap+Rubber	Paper
6699	6ml	13x100	Sodium Heparin	Glass	● Safety Cap+Rubber	Paper

Ref.	Volume	Size(mm)	Additive	Material	Cap Color	Label
6120	2ml	13x75	Lithium Heparin	PET	● Safety Cap+Rubber	Transparent/Paper
6122	3ml	13x75	Lithium Heparin	PET	● Safety Cap+Rubber	Transparent/Paper
6124	4ml	13x75	Lithium Heparin	PET	● Safety Cap+Rubber	Transparent/Paper
6126	5ml	13x100	Lithium Heparin	PET	● Safety Cap+Rubber	Transparent/Paper
6128	6ml	13x100	Lithium Heparin	PET	● Safety Cap+Rubber	Transparent/Paper
6136	10ml	16x100	Lithium Heparin	PET	● Safety Cap+Rubber	Transparent/Paper
6702	3ml	13x75	Lithium Heparin	Glass	● Safety Cap+Rubber	Paper
6703	4ml	13x75	Lithium Heparin	Glass	● Safety Cap+Rubber	Paper
6704	5ml	13x100	Lithium Heparin	Glass	● Safety Cap+Rubber	Paper
6705	6ml	13x100	Lithium Heparin	Glass	● Safety Cap+Rubber	Paper

For clinical chemistry, lithium heparin is generally preferred over sodium heparin.

Heparin Tube (Separator Gel)

KDL plasma tubes with separating gel for clinical chemistry are available with spray-dried lithium heparin additives.

Description

- The separation gel effectively separates plasma from blood cells during centrifugation, preventing plasma contamination.
- KDL Lithium Heparin & Gel tubes ensure that routine analytes, such as potassium and glucose, remain stable for up to one week when stored at 2–8°C. The inert gel forms a barrier that separates serum from the blood clot, preventing contamination from cellular components during centrifugation.
- To activate the anticoagulant, gently invert the tube 8–10 times immediately after blood collection.
- Centrifugation: 1800–2200g for 8–15 minutes at 18–25°C.



Ref.	Volume	Size(mm)	Additive	Material	Cap Color	Label
6177	3ml	13x75	Lithium Heparin & Gel	PET	<div></div> Safety Cap+Rubber	Paper
6179	4ml	13x100	Lithium Heparin & Gel	PET	<div></div> Safety Cap+Rubber	Paper
6181	5ml	13x100	Lithium Heparin & Gel	PET	<div></div> Safety Cap+Rubber	Paper

EDTA Tube

EDTA salts (ethylenediamine tetraacetic acid) are used in hematological studies to anticoagulate whole blood because the cellular components of blood could be well preserved by EDTA particularly.

Description

- EDTA inhibits the coagulation process by chelating calcium in the blood. K3-EDTA provides a stronger anticoagulant effect compared to K2-EDTA. This results in greater red blood cell (RBC) shrinkage and a more significant increase in cell volume over time.
- The anticoagulant effect of EDTA is irreversible.
- After the tube is filled with blood, gently invert the tube 8–10 times to ensure thorough mixing and adequate anticoagulation of the specimen.



Ref.	Volume	Size(mm)	Additive	Material	Cap Color	Label
6049	2ml	13x75	K2 EDTA	PET	<div></div> Safety Cap+Rubber	Paper/Transparent
6051	3ml	13x75	K2 EDTA	PET	<div></div> Safety Cap+Rubber	Paper/Transparent
6053	4ml	13x75	K2 EDTA	PET	<div></div> Safety Cap+Rubber	Paper/Transparent
6055	5ml	13x100	K2 EDTA	PET	<div></div> Safety Cap+Rubber	Paper/Transparent
6057	6ml	13x100	K2 EDTA	PET	<div></div> Safety Cap+Rubber	Paper/Transparent
6063	10ml	16x100	K2 EDTA	PET	<div></div> Safety Cap+Rubber	Paper/Transparent
6676	2ml	13x75	K2 EDTA	Glass	<div></div> Safety Cap+Rubber	Paper
6677	3ml	13x75	K2 EDTA	Glass	<div></div> Safety Cap+Rubber	Paper
6678	4ml	13x75	K2 EDTA	Glass	<div></div> Safety Cap+Rubber	Paper
6679	5ml	13x100	K2 EDTA	Glass	<div></div> Safety Cap+Rubber	Paper
6680	6ml	13x100	K2 EDTA	Glass	<div></div> Safety Cap+Rubber	Paper

Ref.	Volume	Size(mm)	Additive	Material	Cap Color	Label
6066	2ml	13x75	K3 EDTA	PET	<div></div> Safety Cap+Rubber	Paper/Transparent
6068	3ml	13x75	K3 EDTA	PET	<div></div> Safety Cap+Rubber	Paper/Transparent
6070	4ml	13x75	K3 EDTA	PET	<div></div> Safety Cap+Rubber	Paper
6072	5ml	13x100	K3 EDTA	PET	<div></div> Safety Cap+Rubber	Paper
6074	6ml	16x100	K3 EDTA	PET	<div></div> Safety Cap+Rubber	Paper
6683	2ml	13x75	K3 EDTA	Glass	<div></div> Safety Cap+Rubber	Paper
6684	3ml	13x75	K3 EDTA	Glass	<div></div> Safety Cap+Rubber	Paper
6685	5ml	13x100	K3 EDTA	Glass	<div></div> Safety Cap+Rubber	Paper

EDTA Tubes with Separator Gel

EDTA Tubes with Separator Gel are used for the separation of undiluted plasma from whole blood for molecular diagnostic test methods.

Description

- Infectious samples can be handled safely, minimizing the risk of exposure to blood in test tubes. Plasma is prepared in closed KDL tubes and can be transported directly, eliminating the need for sub-loading or re-labeling from primary to secondary containers.
- The gel barrier ensures that plasma remains separated from red blood cells, maintaining plasma quality and stability.
- Viral Load Stability:
6 hours: Whole blood at room temperature
24 hours: Separated plasma at room temperature
5 days: Separated plasma refrigerated at 4°C
- After blood collection, gently invert the tube 5–10 times to ensure proper mixing and anticoagulation.
- Centrifugation Conditions: 1500g (RCF) for 10 minutes at 18–25°C.



Ref.	Volume	Size(mm)	Additive	Material	Cap Color	Label
6142	3ml	13x75	K2 EDTA& Gel	PET	○ Safety Cap+Rubber	Paper
6144	4ml	13x100	K2 EDTA& Gel	PET	○ Safety Cap+Rubber	Paper
6146	5ml	13x100	K2 EDTA& Gel	PET	○ Safety Cap+Rubber	Paper

Advance Tubes

An inert gel is added in KDL advanced gel & clot activator tubes. The gel can separate the serum and the blood clot, which prevents the contamination of the serum from the separated cellular components during centrifugation.

Description

- In routine clinical chemistry, analytes such as potassium and glucose remain stable for up to one week when stored at 2–8°C.
- The gel barrier between serum and clotting ensures stability, enhancing analyte integrity and improving overall sample quality. Additionally, it eliminates the risk of misidentification that can occur when using secondary tubes.
- Clotting Time: The recommended coagulation time is 15–30 minutes.
- Centrifugation Conditions: 1500–2200g (RCF) for 10 minutes at 18–25°C.



Ref.	Volume	Size(mm)	Additive	Material	Cap Color	Label
6026	3ml	13x75	Clot Activator & Gel	PET	● Safety Cap+Rubber	Paper
6028	4ml	13x100	Clot Activator & Gel	PET	● Safety Cap+Rubber	Paper
6029	5ml	13x100	Clot Activator & Gel	PET	● Safety Cap+Rubber	Paper
6032	8ml	16x100	Clot Activator & Gel	PET	● Safety Cap+Rubber	Paper
6668	3ml	13x75	Clot Activator & Gel	Glass	● Safety Cap+Rubber	Paper
6669	4ml	13x100	Clot Activator & Gel	Glass	● Safety Cap+Rubber	Paper
6670	5ml	13x100	Clot Activator & Gel	Glass	● Safety Cap+Rubber	Paper

Blood Glucose Analysis Tubes

KDL blood glucose analysis tubes can be used for clinical glucose analysis by adding sodium fluoride, heparin sodium, K2 EDTA and potassium oxalate.

Description

- The additive (sodium fluoride or sodium heparin) in KDL blood glucose tubes effectively inhibits enzymatic activity in the glycolytic pathway. Sodium fluoride, in particular, acts as an inhibitor of glucose degradation.
- To ensure proper mixing, KDL glucose tubes should be inverted 8–10 times immediately after blood collection.
- Centrifugation Conditions: ≤1300g (RCF) for 10 minutes at 18–25°C.



Ref.	Volume	Size(mm)	Additive	Material	Cap Color	Label
6038	2ml	13x75	Sodium Fluoride & Sodium Heparin	PET	● Safety Cap+Rubber	Paper
6040	3ml	13x75	Sodium Fluoride & Sodium Heparin	PET	● Safety Cap+Rubber	Paper
6042	4ml	13x100	Sodium Fluoride & Sodium Heparin	PET	● Safety Cap+Rubber	Paper
6044	5ml	13x100	Sodium Fluoride & Sodium Heparin	PET	● Safety Cap+Rubber	Paper
6672	2ml	13x75	Sodium Fluoride & Sodium Heparin	Glass	● Safety Cap+Rubber	Paper
6673	3ml	13x75	Sodium Fluoride & Sodium Heparin	Glass	● Safety Cap+Rubber	Paper
6674	4ml	13x100	Sodium Fluoride & Sodium Heparin	Glass	● Safety Cap+Rubber	Paper
6675	5ml	13x100	Sodium Fluoride & Sodium Heparin	Glass	● Safety Cap+Rubber	Paper

Ref.	Volume	Size(mm)	Additive	Material	Cap Color	Label
6270	3ml	13x75	Sodium Fluoride & Potassium Oxalate	PET	● Safety Cap+Rubber	Paper
6272	4ml	13x75	Sodium Fluoride & Potassium Oxalate	PET	● Safety Cap+Rubber	Paper
6274	5ml	13x100	Sodium Fluoride & Potassium Oxalate	PET	● Safety Cap+Rubber	Paper
6276	6ml	13x100	Sodium Fluoride & Potassium Oxalate	PET	● Safety Cap+Rubber	Paper

Ref.	Volume	Size(mm)	Additive	Material	Cap Color	Label
6281	2ml	13x75	Sodium Fluoride/K2 EDTA	PET	● Safety Cap+Rubber	Paper
6283	3ml	13x75	Sodium Fluoride/K2 EDTA	PET	● Safety Cap+Rubber	Paper
6285	4ml	13x100	Sodium Fluoride/K2 EDTA	PET	● Safety Cap+Rubber	Paper
6287	5ml	13x100	Sodium Fluoride/K2 EDTA	PET	● Safety Cap+Rubber	Paper

ESR Tube

The ESR tube (Erythrocyte Sedimentation Rate tube) is used for blood collection to measure the erythrocyte sedimentation rate (ESR). This blood test is primarily used to diagnose and monitor the progression of inflammation or various medical conditions such as autoimmune diseases, infections, and chronic inflammatory disorders.

Description

- KDL ESR tubes contain a buffered sodium citrate solution with a concentration of 3.8%. The solution is formulated in a 1:4 ratio of citrate solution to blood. Accurate blood collection is crucial for obtaining precise results in Erythrocyte Sedimentation Rate (ESR) analysis.
- Specification: 3.8% Sodium Citrate
- Tube Mixing:
ESR (Erythrocyte Sedimentation Rate) tubes should be gently inverted 180° and mixed 8-10 times to ensure proper anticoagulation and accurate test results.



Ref.	Volume	Size(mm)	Additive	Material	Cap Color	Label
6093	2ml	13x75	3.8% Sodium Citrate	PET/PP	● Safety Cap+Rubber	Paper
6094	3ml	13x75	3.8% Sodium Citrate	PET/PP	● Safety Cap+Rubber	Paper
6095	4ml	13x75	3.8% Sodium Citrate	PET/PP	● Safety Cap+Rubber	Paper
6693	2ml	13x75	3.8% Sodium Citrate	Glass	● Safety Cap+Rubber	Paper
6694	3ml	13x75	3.8% Sodium Citrate	Glass	● Safety Cap+Rubber	Paper
6692	1,6ml	8x120	3.8% Sodium Citrate	Glass	● Safety Cap+Rubber	Paper
6695	5ml	13x100	3.8% Sodium Citrate	Glass	● Safety Cap+Rubber	Paper

ACD Tube

KDL ACD tubes are suitable for blood bank research,HLA typing, DNA paternity testing and other research.It can effectively reduce the pre-analysis error of the specimen, improve the test accuracy, provide safety protection forpatients and medical staff,reduce nosocomial infection,The anti-coagulant ACD (Acid Citrate Dextrose) is used for the conservation of erythrocytes.

Description

- ACD is available in two solutions, A and B, each with different mixing ratios. Studies have shown that ACD solution B offers superior DNA preservation compared to EDTA and heparin at room temperature. Under the protection of ACD solution, DNA remains stable even after three cycles of freezing and thawing.
- Centrifugation Conditions: ≤1300g (RCF) for 10 minutes at 25°C.
- Tube Mixing: Gently invert the tube 180° and mix 8–10 times to ensure proper anticoagulation.



Anti coagulant	ACD solution A	ACD solution B
Citrate	3.30mg/ml	1.89mg/ml
Citrate acid	1.20mg/ml	0.69mg/ml
Dextrose	3.68mg/ml	2.1mg/ml
Potassium Sorbate	0.03mg/ml	0.03mg/ml

The figures represent the final concentration in the blood in each case.

Ref.	Volume	Size(mm)	Additive	Material	Cap Color	Label
6159	4ml	13x100	ACD Solution A	PET	Yellow Safety Cap+Rubber	Paper
6161	6ml	13x100	ACD Solution A	PET	Yellow Safety Cap+Rubber	Paper
6162	8ml	13x100	ACD Solution A	PET	Yellow Safety Cap+Rubber	Paper
6166	3ml	13x75	ACD Solution A	PET	Yellow Safety Cap+Rubber	Paper
6716	2ml	13x75	ACD Solution A	PET	Yellow Safety Cap+Rubber	Paper

Ref.	Volume	Size(mm)	Additive	Material	Cap Color	Label
6167	4ml	13x100	ACD Solution B	PET	Yellow Safety Cap+Rubber	Paper
6169	6ml	13x100	ACD Solution B	PET	Yellow Safety Cap+Rubber	Paper
6170	8ml	13x100	ACD Solution B	PET	Yellow Safety Cap+Rubber	Paper

Custom Blood Collection Tubes

KDL offers a wide range of custom blood collection tubes tailored to meet the unique requirements of specific diagnostic tests, environmental conditions, and specialized applications. With precision-engineered solutions, our custom tubes provide reliable sample preservation, enhanced analytical performance, and improved handling under a variety of conditions.

Demonstrate

- Aprotinin Tube
- Endotoxins Tube
- Vacuum Tubes for High Altitude





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Blood Collection Needle

KDL Blood Collection Needle contain safety type blood collection needle,visible flashback blood collection needle,blood collection components with complete specifications and model.



**SINGLE-USE SAFETY PEN-TYPE
BLOOD COLLECTION NEEDLES**

KDL blood collection needle with safety device, the design of safe protector cap can shield the cannula after use, prevent needlepoint from stabbing nurse, patient or other people, which can effectively reduce infection. This kind of blood collection needle with safety device is a safe substitute of the aeneral blood collection needle for clinical application.



**BLOOD-COLLECTING NEEDLES
SAFETY DOUBLE-WING TYPE**

Customized and exquisite self-sealing: when replacing the vacuum collection tube in use, the compressed rubber sleeve will rebound naturally, achieve the sealing effect, so that the blood will not flow out, protecting the medical staff from the accidental injury of the contaminated needle tip, avoiding the spread of blood borne diseases, and creating a safer working environment for the medical staff.

Safety Pen-Type Blood Collection Needles

Safety Pen-Type Blood-collection Needle is intended for medicine blood or plasma collection.

Description

- The product after use of the needle shield, protect the medical staff and patients, and help avoid needle stick injuries and potential infection.
- Product could be provided either with or without latex.
- Fast needle insertion, less pain, and less tissue breakdown.
- CE, ISO 13485.
- One puncture, multiple blood collection, easy to operate.
- Needle tube with thin wall design, large inner diameter and high flow rate.
- The safety device has a non-slip pattern design.
- Connect the screw-type needle holder for use.



Gauge	OD(mm)	Color	Length
23G	0.60	Blue	1'~1 1/2"(25~38mm)
22G	0.70	Black	1'~1 1/2"(25~38mm)
21G	0.80	Green	1'~1 1/2"(25~38mm)
20G	0.90	Yellow	1'~1 1/2"(25~38mm)
18G	1.20	Pink	1'~1 1/2"(25~38mm)

Safety Double-Wing Type Blood-Collection Needles

Safety Double-Wing Type Blood-collection Needle is intended for medicine blood or plasma collection.

Description

- Product could be provided either with or without latex or DEHP.
- Transparent tubing allows observation of blood flow during blood collection.
- Fast needle insertion, less pain, and less tissue breakdown.
- The inner diameter of the needle tube is large and the flow rate is high;
- The butterfly wing design is easy to operate, and the color of the wings distinguishes the needle gauge.
- CE, ISO 13485.
- The double (single) concave convex combination makes the puncture operation more secure and more reliable;
- The shielded scalp vein needle has a needle tip shielding sheath. After the infusion, by holding the shield protective cap in one hand and pulling the catheter in the other hand, pull the infusion needle tip into the shielding sheath to shield the needle tip and protect the medical staff from accidents that contaminate the needle tip, to avoid cross infection;



Gauge	OD(mm)	Color	Size	KNBCSS02 TYPE REF	KNBCSS03 TYPE REF	Length
25G	0.50	Orange	25GX20	KNBCSS0225G20	KNBCSS0325G20	3/4"(20mm)
23G	0.60	Blue	23GX20	KNBCSS0223G20	KNBCSS0323G20	3/4"(20mm)
22G	0.70	Black	22GX20	KNBCSS0222G20	KNBCSS0322G20	3/4"(20mm)
21G	0.80	Green	21GX20	KNBCSS0221G20	KNBCSS0321G20	3/4"(20mm)
20G	0.90	Yellow	20GX20	KNBCSS0220G20	KNBCSS0320G20	3/4"(20mm)
19G	1.10	Cream	19GX20	KNBCSS0219G20	KNBCSS0319G20	3/4"(20mm)

Pen-Type Blood Collection Needles

Pen-Type Blood-collection Needle is intended for medicine blood or plasma collection.

Description

- The product after use of the needle shield, protect the medical staff and patients, and help avoid needle stick injuries and potential infection.
- Product could be provided either with or without latex.
- Fast needle insertion, less pain, and less tissue breakdown.
- CE, ISO 13485.
- One puncture, multiple blood collection, easy to operate.
- Needle tube with thin wall design, large inner diameter and high flow rate.
- The safety device has a non-slip pattern design.
- Connect the screw-type needle holder for use.



Gauge	OD(mm)	Color	Size	KNBCP01 TYPE REF	Length
23G	0.60	Blue	23GX38	KNBCP0123G38	1 1/2"(38mm)
22G	0.70	Black	22GX38	KNBCP0122G38	1 1/2"(38mm)
22G	0.70	Black	22GX32	KNBCP0122G32	1 1/4"(32mm)
21G	0.80	Green	21GX38	KNBCP0121G38	1 1/2"(38mm)
21G	0.80	Green	21GX25	KNBCP0121G25	1"(25mm)
20G	0.90	Yellow	20GX38	KNBCP0120G38	1 1/2"(38mm)
18G	1.20	Pink	18GX38	KNBCP0118G38	1 1/2"(38mm)

Injection Needle Type Blood Collection Needles

Injection Needle Type Blood-collection Needle is intended for medicine blood or plasma collection.

Description

- The product after use of the needle shield, protect the medical staff and patients, and help avoid needle stick injuries and potential infection.
- Product could be provided either with or without latex.
- Fast needle insertion, less pain, and less tissue breakdown.
- CE, ISO 13485.
- One puncture, multiple blood collection, easy to operate.
- Needle tube with thin wall design, large inner diameter and high flow rate.
- The safety device has a non-slip pattern design.
- Connect the screw-type needle holder for use.
- The product can be disassembled.



Gauge	OD(mm)	Color	Size	KNBCHO1 TYPE REF	Length
23G	0.60	Blue	23GX38	KNBCHO123G38	1 1/2"(38mm)
22G	0.70	Black	22GX38	KNBCHO122G38	1 1/2"(38mm)
21G	0.80	Green	21GX38	KNBCHO121G38	1 1/2"(38mm)
20G	0.90	Yellow	20GX38	KNBCHO120G38	1 1/2"(38mm)
18G	1.20	Pink	18GX38	KNBCHO118G38	1 1/2"(38mm)

Visible Flashback Type Blood-Collection Needles

Visible Flashback Type Blood-collection Needle is intended for medicine blood or plasma collection.

Description

- Safe specimen collection and handling.
- Visible flashback window allows blood flow observation.
- Product could be provided either with or without latex.
- Large inner diameter of needle tube, high flow rate ;
- Professional needle tip design: accurate angle, moderate length, suitable for venous blood collection,
- Fast needle puncture, less pain, less tissue damage;
- Specification is identified by the colors of protective cap, which is easy to distinguish and use ;
- CE, ISO 13485.



Gauge	OD(mm)	Color	Size	KNBCP02 TYPE REF	Length
23G	0.60	Blue	23GX25	KNBCP0223G25	1'(25mm)
23G	0.60	Blue	23GX38	KNBCP0223G38	1 1/2"(38mm)
22G	0.70	Black	22GX38	KNBCP0222G38	1 1/2"(38mm)
23G	0.70	Black	22GX25	KNBCP0222G25	1'(25mm)
21G	0.80	Green	21GX38	KNBCP0221G38	1 1/2"(38mm)
21G	0.80	Green	21GX25	KNBCP0221G25	1'(25mm)

Wing Type Blood-Collection Needle

Wing Type Blood-collection Needle is intended for medicine blood or plasma collection.

Description

- Product could be provided either with or without latex and DEHP.
- Transparent tube is good for observation of venous blood return.
- CE, ISO 13485.
- The needle tube has a large inner diameter and high flow rate;
- Fast needle insertion, less pain, and less tissue breakdown.
- Precise angle of needle tip, suitable for venous blood collection characteristics;
- The butterfly wing design is easy to operate, and the color of the wings distinguishes the needle gauge.



Gauge	OD(mm)	Color	Size	KNBCS02 TYPE REF	Length
25G	0.50	Orange	25GX20	KNBCS0225G20	3/4"(20mm)
23G	0.60	Blue	23GX20	KNBCS0223G20	3/4"(20mm)
22G	0.70	Black	22GX20	KNBCS0222G20	3/4"(20mm)
21G	0.80	Green	21GX20	KNBCS0221G20	3/4"(20mm)
20G	0.90	Yellow	20GX20	KNBCS0220G20	3/4"(20mm)

Gauge	OD(mm)	Color	Size	KNBCS03 TYPE REF	Length
25G	0.50	Orange	25GX20	KNBCS0325G20	3/4"(20mm)
23G	0.60	Blue	23GX20	KNBCS0323G20	3/4"(20mm)
22G	0.70	Black	22GX20	KNBCS0322G20	3/4"(20mm)
21G	0.80	Green	21GX20	KNBCS0321G20	3/4"(20mm)
20G	0.90	Yellow	20GX20	KNBCS0320G20	3/4"(20mm)
19G	1.10	Cream	19GX20	KNBCS0319G20	3/4"(20mm)

Safety Holder

Blood Collection Needles with Safety Holder is a medical instrument produced by KDL. And it is a protective product applied in the clinical venous sampling which is achieved by blood collection needles to secure the operators.

Description

- The product after use of the needle shield, protect the medical staff and patients, and help avoid needle stick injuries and potential infection.
- CE, ISO 13485.

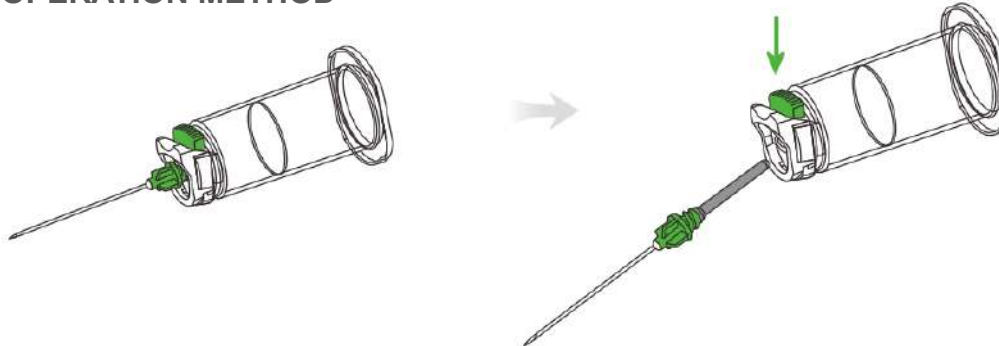


KHO5 OPERATION METHOD



- 1、 After collection of the blood, thumb press down on the safety device of the holder.
- 2、 Make safety device safety lock completely locked needle.

KHO6 OPERATION METHOD



- 1、 Put blood collection needle into the holder
- 2、 After collection of the blood, thumb press down the green button.

Parts

Single head blood-collecting needle and needle holder matched with luer slip or luer lock, which is more convenient to use

Description

- CE, ISO 13485.
- Material: PP, SUS304, ABS
- OEM/ODM: OEM for customized



Artwork No.	Size	REF	Diagram
CTZ.41.00C	0.8X19	KNBCH01	
CTZ.176.00	0.9X19	KNBCH02	
CTZ.177.00	0.9X19	KNBCH03	
CTY.lx.143		KH01	
CTZ.lx.153		KH02	
CTZ.lx.152		KH03	

Parts

Delicate self-sealing: when the vacuum collection tube is replaced in use, the compressed rubber sleeve will spring back naturally, playing a sealing role.

Description

- CE, ISO 13485.
- OEM/ODM: OEM for customized

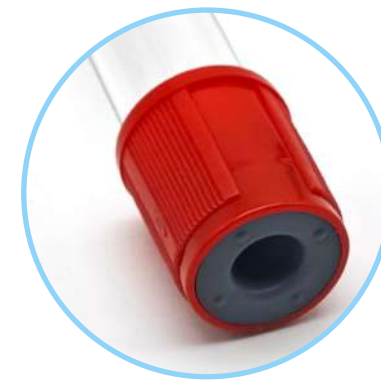


No.	Gauge	Size	REF	Remark	Diagram
1	20G	0.9X21mm	KNLA0220G21	ABS	
2	21G	0.8X19mm	KNLA0321G19	ABS	
3	21G	0.8X19mm	KNLA0421G19	ABS	
4	21G	0.8X19mm	KNLA0521G19	PP	
5	21G	0.8X19mm	KNLA0621G19	PP	
6	21G	0.8X19mm	KNLA0721G19	ABS	



Description

- The urine cup features optimized threading for easy opening and closing, and is equipped with a leak-resistant screw cap to minimize the risk of contamination and specimen exposure. The integrated transfer device ensures precise measurements, enhancing accuracy during testing.



Vacuum Urine Cup

This product is designed for the collection of liquid samples during the inspection process and is compatible with vacuum tubes. It is managed in accordance with non-medical device regulations.

- Made from durable hard plastic, the cup maintains its shape under normal usage conditions. It is marked with clear scales for easy observation of liquid collection levels, facilitating better storage and handling.
- The special sealing design, when used in conjunction with vacuum tubes, ensures that liquids are securely contained with no exposure to the outside environment, preventing odors from escaping and improving the laboratory working conditions.

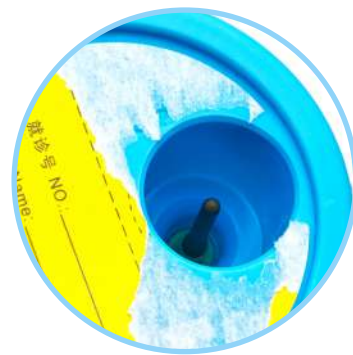
Procedures for Use

1、 Preparation: Tear open the PE bag containing each individual product along the designated tear line. Fill in the corresponding number and name on the label of the cup cover.

Notes:

- The caps are equipped with rubber sleeve needles. Do not puncture the dotted circle on the label to avoid injury.
- After liquid collection, ensure the cup cap is securely tightened. To prevent spillage, do not overturn the urine cup unless necessary during subsequent use or storage.
- Use the provided number to mark the vacuum tube, ensuring consistency with the test result documentation to avoid sample misidentification.

2、 Liquid Collection: Unscrew the cup cover to collect the liquid. After collection, securely screw the cup cap back on.



3、 Liquid Transfer through Vacuum Tubes:

- Tear open the label marked with the "open symbol" along the middle dotted line.
- Insert the prepared vacuum tube into the hole on the cup cap, ensuring the rubber sleeve needle penetrates the vacuum tube piston.
- The liquid in the cup will be automatically drawn into the vacuum tube. Hold for 2-3 seconds, then remove the vacuum tube.

4、 Inspection: Proceed with testing using the liquid collected in the vacuum tube. Ensure the liquid remains inside the tube as required.

5、 Disposal: After use, properly dispose of the product in accordance with applicable disposal guidelines.



KDL's Commitment to Sustainability

By adhering to industry best practices and regulatory requirements, KDL strives to create a healthier future for both people and the planet

We are Dedicated to Sustainable Practices

At KDL, we are dedicated to sustainable practices that minimize our environmental footprint. We strive to integrate eco-friendly materials and energy-efficient processes throughout our production, continuously reducing waste, emissions, and resource consumption.



Eco-Friendly Product Design

Our commitment to environmental responsibility extends to product design. We ensure that our medical solutions meet the highest quality standards while aligning with environmental sustainability goals.



Innovative Wastewater Management

We have implemented a specialized sewage treatment system to eliminate wastewater discharge, safeguarding the ecological environment and promoting long-term sustainability.



Green and Low-Carbon Development

By adhering to industry best practices and regulatory requirements, KDL embraces a green and low-carbon development model. We actively contribute to building a sustainable economy and promoting ecological health and well-being for future generations.



On-Site Training

Our expert team from local distributor provides tailored training sessions covering product usage, safety protocols, and best practices to ensure effective implementation and optimal performance.



We have complete and rigorous documentation on product details, usage, etc. to ensure the standardization and safety of product usage.



KDL Training Services

At KDL, we offer comprehensive training services to support our customers in maximizing the value of our products.



We prioritize hands-on learning and offer remote training option to meet our customers' needs.

Our goal is to empower healthcare professionals with the knowledge and skills required to enhance patient care and achieve operational efficiency.

Video training



LinkedIn

KDL Meditech
<https://cutt.ly/le8olyaC>



YouTube

KDL Meditech
<https://cutt.ly/re8oU8JZ>



KDL's Commitment to Social Responsibility

At KDL, we fully understand our responsibilities as an enterprise to uphold the highest standards of quality, ethics, and sustainability.

As a leader in medical technology,

we are committed to fostering strong partnerships, supporting our customers' success, and contributing positively to the communities we serve. Our approach integrates corporate responsibility with business excellence to drive long-term value for all stakeholders.

Environmental Responsibility

- o Actively reducing pollution.
- o Increasing the use of renewable energy sources.
- o Offsetting negative environmental impacts through sustainable practices.

Ethical Responsibility

- o Ensuring fair treatment of all stakeholders, including employees and customers.
- o Implementing responsible sourcing practices for materials.
- o Promoting an equitable and inclusive work environment.

Philanthropic Responsibility

- o Allocating a portion of earnings to charitable initiatives.
- o Supporting causes that may not directly relate to business operations but align with broader societal goals.

Economic Responsibility

- o Aligning financial decisions with the company's commitment to sustainability and ethical practices.
- o Ensuring profitability while advancing efforts in environmental, ethical, and philanthropic areas.

