# **UNI-VAC™**

# Evacuated Blood Collection







Labex stands as an esteemed manufacturer rooted in Seoul, South Korea. Founded in 2016, it has earned distinction for its production of vital diagnostic and clinical products, with a notable specialization in blood collection tubes and sample handling instruments. Committed to delivering high-quality, Korean-crafted solutions at competitive pricing, Labex distinguishes itself in the industry. Labex extends OEM services to leading medial and diagnostic corporations and maintains a global clientele.

A diverse array of patrons, including diagnostics laboratories, hospitals, and blood banks, place their trust in Labex for superior product offerings. Labex is guided by a fundamental ethos of prioritizing value, quality, and transparency in all undertakings.



Introducing UNI-VAC, the innovative evacuated blood collection system, designed with a focus on delivering high-quality, clinically proven essentials. Our user-friendly system simplifies blood sample collection, eliminating the need for further handling. UNI-VAC's quick and hygienic tube change ensures specimen integrity, while precise cap colors follow international recommendations for easy identification of tube types. Experience the future of blood collection with UNI-VAC.

#### Contents

UNI-VAC Blood Collection Tube —	04p
	Serum
	Serum with Gel
	EDTA
	Coagulation
	Plasma
	Glucose
	ESR
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	Cell-Free DNA
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# Range of Products

Out	0	0.1.171	Total Voume(ml)	1	1.6	1.8	2	2.4	2.7	3	3.5	3.6	4	4.5	5	6	8	9
Color	Specification	Additive	Tube size(mm)	13*75	13*75	13*75	13*75	13*75	13*75	13*75	13*75	13*75	13*75	13*100	13*100	13*100	16*100	16*100
Red	Serum		Clot activator															
Dark Yellow	Serum(Gel)	С	lot activator + Gel															
Lavender /Light Lavender	Haematology		K2 EDTA K3 EDTA															
Light Blue	Coagulation		n Citrate 0.129M 9:1 3.8% n Citrate 0.109M 9:1 3.2%															
Green / Brown	Plasma		Lithium Heparin Sodium Heparin															
Light Green	Plasma(Gel)	Lit	hium Heparin + Gel															
Grey	Glucose	S	Godium Fluoride + K3 EDTA															
Black	ESR		Trisodium Citrate 0.129M 4:1 3.8%															
White	EGT	ŀ	K2 EDTA with Gel															
White	No additive		None															
White	Cell-Free DNA	K3 I	EDTA & Preservative															





#### Serum

UNI-VAC Serum tubes are coated with silicone and micronized silica particles to accelerate clotting by gentle inversion of 8-10 times. Samples processed in these tubes may also be used for routine blood screening, immunology, and diagnostic testing of serum for infectious disease.

Cap color	Additive	Reference	Tube size (mm)	Vol. (mL)	Qty. Tray / Box
		101040	13 x 75	4.0	
	Clot Activator	102060	13 x 100	6.0	100 / 1,200
		103090	16 x 100	9.0	





#### Serum with Gel

UNI-VAC Serum with Gel tubes are coated with silicone and micronized silica particles containing barrier polymer at the bottom of tubes and this material causes it to move upward to serum-clot interface forming a stable separating barrier during centrifugation. The serum may be aspired directly from the collection tube eliminating the need for manual transfer to another container.

The barrier provides stable shipping conditions for at least 48 hours.

Cap color	Additive	Reference	Tube size (mm)	Vol. (mL)	Qty. Tray / Box
	Olat Aati intai	111035	13 x 75	3.5	
	Clot Activator with Gel	112050	13 x 100	5.0	100 / 1,200
	With Ger	113080	16 x 100	8.0	





# **EDTA**

UNI-VAC EDTA tubes have two kinds of closure colors; Light Lavender and Lavender. The tubes with Light Lavender closure are coated with EDTA-K2 and the tubes with Lavender closure are coated with EDTA-K3 and both have a concentration of 1.8mg EDTA per 1ml of blood. EDTA Tubes must be inverted 8-10 times to ensure complete mixing with blood for correct coagulation value. Erythrocytes and Leucocytes are stable for 24 hours with EDTA while Thrombocytes are stable for 6-8 hours. Blood smearing should be done within 3 hours after blood collection.

Cap color	Additive	Reference	Tube size (mm)	Vol. (mL)	Qty. Tray / Box			
		201010	13 x 75	1.0				
		201020	13 x 75	2.0				
	EDTA-K2	201030	13 x 75	3.0				
	EDIA-NZ	201040	13 x 75	4.0				
		202060	13 x 100	6.0				
		203090	16 x 100	9.0	100 / 1,200			
		211010	13 x 75	1.0	10071,200			
		211020	13 x 75	2.0				
	EDTA-K3	211030	13 x 75	3.0				
	EDIA-N3	211040	13 x 75	4.0				
		212060	13 x 100	6.0				
		213090	16 x 100	9.0				





# Coagulation

UNI-VAC Coagulation tubes are filled with sodium citrate solution additives, and they must be inverted 4-5 times to ensure complete mixing with blood for the correct coagulation value. The mixing ratio of Tri-sodium citrate with blood is 1:9.

Cap color	Additive	Reference	Tube size (mm)	Vol. (mL)	Qty. Tray / Box
		304018	13 x 75 (D)	1.8	
		304027	13 x 75 (D)	2.7	
	Sodium Citrate 3.2%	301018	13 x 75	1.8	
	Socium Citiate 5.2%	301027	13 x 75	2.7	
		301036	13 x 75	3.6	
		302045	13 x 100	4.5	100 / 1,200
		314018	13 x 75 (D)	1.8	10071,200
		314027	13 x 75 (D)	2.7	
	Sodium Citrate 3.8%	311018	13 x 75	1.8	
	Sodium Citrate 3.8%	311027	13 x 75	2.7	
		311036	13 x 75	3.6	
		312045	13 x 100	4.5	

<sup>\*(</sup>D) : Double layer tube





#### **Plasma**

UNI-VAC Plasma tubes have 3 kinds of closure colors; Green, Brown, and Light Green. The tubes with Green closure are coated with lithium heparin and the tubes with Brown closure are coated with sodium heparin in the interior wall to inhibit clotting producing a whole blood/plasma sample. The tubes with Light Green closure are coated with lithium heparin in the interior wall with a barrier polymer at the bottom of the tubes. The barrier provides stable shipping conditions for at least 48 hours. After collecting specimens, the test is recommended to be done within 2 hours from the time of collection.

Cap color	Additive	Reference	Tube size (mm)	Vol. (mL)	Qty. Tray / Box
		401010	13 x 75	1.0	
	Lithium Heparin	401040	13 x 75	4.0	
	Ентин перанн	402060	13 x 100	6.0	
		403090	16 x 100	9.0	
	Sodium Heparin	411010	13 x 75	1.0	
		411040	13 x 75	4.0	100 / 1,200
		412060	13 x 100	6.0	
		413090	16 x 100	9.0	
		421010	13 x 75	1.0	
•	Lithium Heparin	421035	13 x 75	3.5	
	with Gel	422045	13 x 100	4.5	
		423080	16 x 100	8.0	





#### Glucose

UNI-VAC Glucose tubes contain EDTA-K3 and Sodium Fluoride (NaF) and are used to determine blood sugar and lactate. The combination of the Sodium Fluoride-EDTA additive in the tube stabilizes the in vivo concentration of glucose in the sample from the beginning.

Cap color	Additive	Reference	Tube size (mm)	Vol. (mL)	Qty. Tray / Box
	Sodium Fluoride	501020	13 x 75	2.0	100 / 1,200
	& EDTA-K3	501030	13 x 75	3.0	10071,200





#### **ESR**

UNI-VAC ESR tubes are filled with sodium citrate solution additives, and they must be inverted 8-10 times to ensure complete mixing with blood for the correct coagulation value. The mixing ratio of Tri-sodium citrate with blood is 1:4.

Cap color	Additive	Reference	Tube size (mm)	Vol. (mL)	Qty. Tray / Box
	C	601016	13 x 75	1.6	100 / 1,200
	Sodium Citrate 3.8%	601024	13 x 75	2.4	10071,200





# EGT (EDTA with gel)

UNI-VAC EGT tubes are coated with EDTA-K2 which has a concentration of 1.8mg EDTA per 1ml of blood and contains a barrier polymer at the bottom of the tubes. The barrier polymer causes it to move upward to the Plasma-Blood cell interface forming a stable separating barrier during centrifugation. The plasma may be aspired directly from the collection tube eliminating the need for manual transfer to another container, and Tubes must be inverted 8-10 times to ensure complete mixing with blood.

Cap color	Additive	Reference	Tube size (mm)	Vol. (mL)	Qty. Tray / Box
		701035	13 x 75	3.5	
	EDTA-K2 with Gel	702050	13 x 100	5.0	100 / 1,200
		703080	16 X 100	8.0	

#### UNI-VAC Blood Collection Tube





#### No Additive

UNI-VAC No Additive tubes are used for collection and transportation of specimen. This product has a proper color closure for direct sampling from a collection cup or an equivalent device. The tubes contain no additive and have sterile interior.

Cap color	Additive	Reference	Tube size (mm)	Vol. (mL)	Qty. Tray / Box
		NA1040	13 x 75	4.0	
	None	NA2060	13 x 100	6.0	100 / 1,200
		NA3090	16 x 100	9.0	





# **Cell-Free DNA**

UNI-VAC cfDNA tube is a device to collect whole blood by direct draw intended for collection, stabilization and transportation of whole blood specimens, and preservation of cell-free plasma DNA.

Cap color	Additive	Reference	Tube size (mm)	Vol. (mL)	Qty. Tray / Box
•	EDTA-K3 & preservative	CD3090	16 x 100	9.0	100 / 1,200

# UNI-VAC Needle and Holder for Blood Collection





#### Needle

UNI-VAC Needle is made using high quality stainless steel, and has uniquely cut razor-sharp ends. The needles are predominantly used in routine blood collection and are exclusively single use. The colour of the needle protective cap simplifies visual recognition of the individual needle gauges.

Cap color	Spec.	Model No.	Packaging
vollov	20G x 1"	UVN-302001	100ea / inner ( 2,000ea / 1box )
yellow	20G x 1.5"	UVN-302002	100ea / inner ( 2,000ea / 1box )
groon	21G x 1"	UVN-302101	100ea / inner ( 2,000ea / 1box )
green	21G x 1.5"	UVN-302102	100ea / inner ( 2,000ea / 1box )
black	22G x 1"	UVN-302201	100ea / inner ( 2,000ea / 1box )
DIACK	22G x 1.5"	UVN-302202	100ea / inner ( 2,000ea / 1box )



Qty. Tray / Box	
100 / 1,000	

#### Holder

UNI-VAC Holder is intended to be used for blood collection by connecting an evacuated collection tube and a needle for collection. Together with UNI-VAC Blood Collection tubes, they are used as a system in routine venipuncture procedures. UNI-VAC Holder is facilitating the connection between an evacuated blood collection tube and a collection needle during blood collection so that specimens can be easily collected.

# Blood Sampling Procedure

Blood sampling is a crucial medical procedure that involves the collection of blood for diagnostic, research, and therapeutic purposes. It is essential to follow a standardized protocol to ensure accuracy, safety, and patient comfort.

# Materials required



- Evacuated blood collection tubes
- Needle and gloves
- Alcohol swabs
- Tourniquet
- Biohazard container

### **Procedure**



Select the appropriate tube(s) for the required specimen(s).



Assemble the needle firmly in the holder to ensure it remains fixed during use.

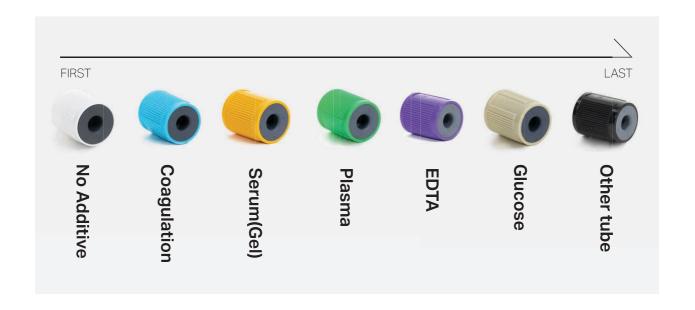


Select a site for venipuncture and apply a tourniquet.

# Centrifugation for tube type

Tube	: Туре	Centrifuge speed (g)	Time (min)
Corum	without Gel	1,500 ~ 1,600	10
Serum	with Gel	1,800 ~ 2,000	10
Diagnas	without Gel	2,000 ~ 2,500	15
Plasma	with Gel	2,200 ~ 2,300	15

# Order of Draw for Blood Collection





Position the patient's arm downward and cleanse the venipuncture site with an alcohol swab.



Remove the needle shield and insert it into the selected site for venipuncture on the patient's arm.



Place the chosen tube into the holder and securely attach the tube to the needle. Be cautious to pierce the center of the tube closure to prevent side-wall puncture and premature vacuum loss.





# LISCIA UTM/VTM Handler

The LISCIA UTM/TVM Handler is a sophisticated apparatus designed for the effortless and streamlined decapping and recapping of UTM (Universal Transportation Medium) lids. Engineered to minimize operator fatigue and enhance efficiency, this equipment ensures both convenience and safety, guarding operators against potential hazards associated with specimen handling.

Model	Dimensions (mm)	Handling rate
UCH-1600	223W x 126L x 267H	Approx. 40~45 ea / min





# **LISCIA Decapper**

The LISCIA Decapper is a cutting-edge solution that excels in rapid and secure opening of various blood collection tubes, all in a single, seamless working cycle. Engineered for unparalleled ease of use, simplicity, and convenience, this advanced equipment effortlessly handles the diversity of tube types, streamlining your workflow with exceptional speed and precision.

SDC-1300R: 13 x 75 mm & 13 x 100 mm (1 ~ 6 mL volume tubes)

SDC-1600R: 16 x 100 mm (8 ~ 10 mL volume tubes)

Model	Dimensions (mm)	Number of slot	Decapping rate
SDC-1300R/SDC-1600R	440W x 347L x 270H	28 ea / cycle	Approx. 70 ~ 80 ea / min

# **Blood Collection Tube**

Cap color	Additive	Reference	Tube size (mm)	Vol. (mL)	Qty. Tray / Box
		101040	13 x 75	4.0	
	Clot Additive	102060	13 x 100	6.0	100 / 1,200
		103090	16 x 100	9.0	
•	Clot Additive with Gel	111035	13 x 75	3.5	100 / 1,200
		112050	13 x 100	5.0	
		113080	16 x 100	8.0	
		201010	13 x 75	1.0	
		201020	13 x 75	2.0	
	EDTA-K2	201030	13 x 75	3.0	
	EDIA-N2	201040	13 x 75	4.0	
		202060	13 x 100	6.0	
		203090	16 x 100	9.0	100 / 1,200
		211010	13 x 75	1.0	10071,200
		211020	13 x 75	2.0	
	EDTA-K3	211030	13 x 75	3.0	
	EDIA-N3	211040	13 x 75	4.0	
		212060	13 x 100	6.0	
		213090	16 x 100	9.0	
		304018	13 x 75 (D)	1.8	
		304027	13 x 75 (D)	2.7	
	0 11 011 1 0 001	301018	13 x 75	1.8	
	Sodium Citrate 3.2%	301027	13 x 75	2.7	
		301036	13 x 75	3.6	
		302045	13 x 100	4.5	
		314018	13 x 75 (D)	1.8	100 / 1,200
		314027	13 x 75 (D)	2.7	
		311018	13 x 75	1.8	
	Sodium Citrate 3.8%	311027	13 x 75	2.7	
		311036	13 x 75	3.6	
		312045	13 x 100	4.5	
		401010	13 x 75	1.0	
		401040	13 x 75	4.0	
	Lithium Heparin	402060	13 x 100	6.0	100 / 1,200
		403090	16 x 100	9.0	
		411010	13 x 75	1.0	
		411040	13 x 75	4.0	
	Sodium Heparin	412060	13 x 100	6.0	
		413090	16 x 100	9.0	
		421010	13 x 75	1.0	
	Lithium Heparin with Gel	421035	13 x 75	3.5	
		422045	13 x 100	4.5	
		423080	16 x 100	8.0	
		501020	13 x 75	2.0	
	Sodium Fluoride & EDTA-K3	501030	13 x 75	3.0	100 / 1,200
	Sodium Citrate 3.8%	601016	13 x 75	1.6	100 / 1,200
•		601024	13 x 75	2.4	
	EDTA-K2 with Gel	701035	13 x 75	3.5	100 / 1,200
0		701033	13 x 100	5.0	
0		703080	16 X 100	8.0	
		NA1040	13 x 75	4.0	100 / 1,200
	None	NA2060	13 x 100	6.0	
0	ivone	NA3090	16 x 100	9.0	
	i l	INASUSU	10 X 100	9.0	

\*(D) : Double layer tube

#### Needle

Cap color	Spec.	Model No.	Packaging
velleur	20G x 1"	UVN-302001	100ea / inner (2,000ea / 1box)
yellow	20G x 1.5"	UVN-302002	100ea / inner (2,000ea / 1box)
green	21G x 1"	UVN-302101	100ea / inner (2,000ea / 1box)
green	21G x 1.5"	UVN-302102	100ea / inner (2,000ea / 1box)
black	22G x 1"	UVN-302201	100ea / inner (2,000ea / 1box)
DIdCK	22G x 1.5"	UVN-302202	100ea / inner (2,000ea / 1box)

