

# Homocysteine



**World Novelty**  
36 hours stable at  
room temperature

The new blood collection tube  
from KABE LABORTECHNIK

KABEVETTE® G  
KABEVETTE® Vacuum  
Primavette® S  
KABEVETTE® N



# Homocysteine: 36 hours stable at room temperature

Preanalytical factors that influence homocysteine testing such as the storage and transportation of blood samples, often pose severe problems in surgical and clinical settings. The new homocysteine blood collection tube from KABE LABORTECHNIK revolutionizes these preanalytical procedures and turns them into daily routine. This global innovation ensures homocysteine stability in whole blood for at least 36 hours at temperatures between 22-25°C.

Homocysteine is an endogenous essential amino acid formed as a central metabolite in the context of transmethylation. In elevated concentrations (>15µmol/l plasma)\* however, it becomes an independent, influenceable risk factor that is associated with a wide range of disorders such as cardiovascular diseases, stroke, arterial thrombosis, neurological/psychiatric diseases and osteoporosis as well as complications during pregnancy. Thus, the measurement of homocysteine has become increasingly important for many medical specialties.

Several aspects have to be taken into consideration regarding homocysteine testing. The preanalytic period, especially the time between blood sampling and centrifugation is of critical importance. During this period blood cells continuously produce homocysteine and release it into plasma or serum. This process falsely increases homocysteine concentrations by about 10% an hour. After 5 hours, the homocysteine concentration in plasma or serum is up to 50% higher than the accurate value.

In order to measure homocysteine values reliably it is pivotal to either centrifuge the blood sample „as soon as possible“ (within 30 minutes after blood collection) or to put the whole blood sample immediately on crushed ice. This blood handling procedure, however, is often impractical in a surgical or clinical setting.

This has now been changed. Blood collection tubes from KABE LABORTECHNIK are treated with a new homocysteine stabilizer to simplify the preanalytic process enormously. This homocysteine stabilizer is a substance that leads to negligibly low di-

lution of plasma elements and, after the blood sample has been mixed well, reliably inhibits the release of homocysteine from blood cells. Intensive studies have shown that the homocysteine level is stable for at least 36 hours at temperatures between 22-25°C.

Immediate centrifugation or storing of blood samples on ice becomes unnecessary! This is an advantage for practitioners especially, since from a preanalytical point of view, it had often been too laborious for them to conduct homocysteine tests at all. Hospitals benefit from time and cost savings due to the easy handling. In addition, considerably longer sample stability reduces the probability of mistakes during preanalytics and at the same time increases the significance of the measured values.

The new homocysteine blood collection tube from KABE LABORTECHNIK yields flexibility and accuracy. It opens up new possibilities and turns homocysteine testing in surgeries and hospitals into a standard procedure.

\* Ref. Refsum H, Smith AD, Ueland PM, Nexø E, Clarke R, McPartlin J, et al. Facts and recommendations about total homocysteine determinations: an expert opinion. Clin Chem 2004;50:3-32

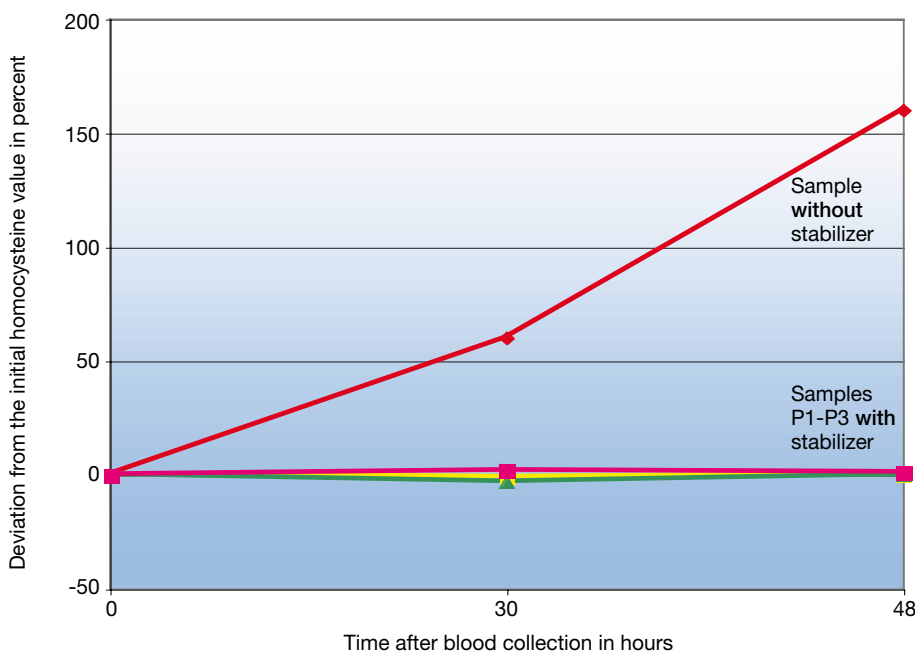
# Flexible and accurate. What does the new homocysteine blood collection tube from KABE LABORTECHNIK offer?



- Stable homocysteine concentration within whole blood at room temperature for at least 36 hours
- No immediate centrifugation after blood sampling
- No immediate storage on crushed ice after blood sampling
- No cool transportation necessary
- No dilution and volume effects
- Point in time of blood collection and transportation duration have no influence on measurement results
- Suitable for overnight mailing
- Appropriate for use in surgery setting
- Easy to perform preanalytic – same handling as standard blood collection
- Compatible with almost all homocysteine analysis applications
- Available as aspiration and vacuum principle

## Homocysteine stability in whole blood over time

**Homocysteine stability:**  
Determination in whole blood samples with and without stabilizer over time



In this test series homocysteine concentrations of three whole blood samples **with** stabilizer and of one whole blood sample **without** stabilizer were determined and compared at three points in time: immediately after blood collection, 30 and 48 hours after blood collection.



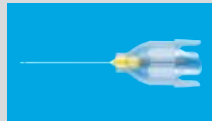


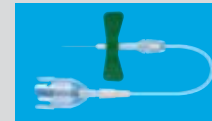
The results indicate that the homocysteine concentrations of the whole blood samples **with** stabilizer were stable over the entire test period. In contrast, the homocysteine concentration of the whole blood sample **without** stabilizer increased during the test interval. After 30 hours the concentration was up to 60% higher than the true value, after 48 hours even 160%.

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Medizinische Universitätsklinik Freiburg

# Homocysteine blood collection range







## KABEVETTE® G and Vacuum

Aspiration and vacuum principle can be combined in one system







					
<b>Homocysteine KABEVETTE® G and Vacuum</b>	<b>Multiple sampling adapter with Luer cone</b>	<b>Multiple sampling adapter with cannula</b>	<b>Multiple sampling adapter with safety cannula</b>	<b>Multiple sampling adapter with cannula and extension tube</b>	<b>Multiple sampling adapter with safety cannula and extension tube</b>
Blood collection tube with homocysteine stabilizer				(„Butterfly“ principle, 350 mm and 120 mm long)	(„Butterfly“ principle, 300 mm long)
<b>Sterile</b>	<b>Sterile</b>	<b>Sterile</b>	<b>Sterile</b>	<b>Sterile</b>	<b>Sterile</b>
<b>Item no. 102150</b> KABEVETTE® G Hcy 772 G 3.5	<b>Item no. 104300</b> AM G 33	<b>Item no. 104000</b> AM G 33 K yellow	<b>Item no. 104005</b> AM G 46 K yellow security	<b>Item no. 104200</b> AM G 33 BF yellow 350	<b>Item no. 104251</b> AM G 46 BF green 300 security
<b>Item no. 112425</b> KABEVETTE® Vacuum Hcy 837 V 3.5		<b>Item no. 104025</b> AM G 33 K green	<b>Item no. 104030</b> AM G 46 K green security	<b>Item no. 104250</b> AM G 33 BF green 350	
		<b>Item no. 104050</b> AM G 33 K black	<b>Item no. 104055</b> AM G 46 K black security	<b>Item no. 104205</b> AM G 33 BF yellow 120	
				<b>Item no. 104255</b> AM G 33 BF green 120	
Packing unit: 50 pcs in dispenser box 500 pcs in despatch box	Packing unit: 100 pcs in dispenser box 1,000 pcs in despatch box	Packing unit: 100 pcs in dispenser box 1,000 pcs in despatch box	Packing unit: 100 pcs in dispenser box 1,000 pcs in despatch box	Packing unit: 100 pcs in dispenser box 1,000 pcs in despatch box	Packing unit: 100 pcs in dispenser box 1,000 pcs in despatch box

## Primavette® S

Primavette® S: The safe system for single and multiple sampling with rubber membrane

					
<b>Homocysteine Primavette® S</b>	<b>Multiple sampling adapter with Luer cone</b>	<b>Multiple sampling adapter with cannula</b>	<b>Multiple sampling adapter with safety cannula</b>	<b>Multiple sampling adapter with cannula and extension tube</b>	<b>Multiple sampling adapter with safety cannula and extension tube</b>
Blood collection tube with homocysteine stabilizer				(„Butterfly“ principle, 350 mm and 120 mm long)	(„Butterfly“ principle, 300 mm long)
<b>Sterile</b>	<b>Sterile</b>	<b>Sterile</b>	<b>Sterile</b>	<b>Sterile</b>	<b>Sterile</b>
<b>Item no. 0959 1210</b> Primavette® S Hcy 2.6	<b>Item no. 0959 9053</b> Sangocan® LUER	<b>Item no. 0959 9002</b> Sangocan® 20 G yellow	<b>Item no. 0959 9005</b> Sangocan® 20 G yellow security	<b>Item no. 0959 9300</b> Sangocan® V 20 G yellow 350	<b>Item no. 0959 9305</b> Sangocan® V 21 G green 300 security
		<b>Item no. 0959 9010</b> Sangocan® 21 G green	<b>Item no. 0959 9015</b> Sangocan® 21 G green security	<b>Item no. 0959 9304</b> Sangocan® V 21 G green 350	
		<b>Item no. 0959 9029</b> Sangocan® 22 G black	<b>Item no. 0959 9035</b> Sangocan® 22 G black security	<b>Item no. 0959 9140</b> Sangocan® V 20 G yellow 120	
				<b>Item no. 0959 9150</b> Sangocan® V 21 G green 120	
Packing unit: 50 pcs in dispenser box 500 pcs in despatch box	Packing unit: 100 pcs in dispenser box 1,000 pcs in despatch box	Packing unit: 100 pcs in dispenser box 1,000 pcs in despatch box	Packing unit: 100 pcs in dispenser box 1,000 pcs in despatch box	Packing unit: 50 pcs in dispenser box 200 pcs in despatch box	Packing unit: 50 pcs in dispenser box 200 pcs in despatch box

## KABEVETTE® N

					
<b>Homocysteine KABEVETTE® N</b>	<b>Multiple sampling adapter with Luer cone</b>	<b>Multiple sampling adapter with cannula</b>	<b>Luer cannula</b>	<b>Multiple sampling adapter with cannula and extension tube</b>	<b>Multiple sampling adapter with safety cannula and extension tube</b>
Blood collection tube with homocysteine stabilizer	For use with all commercial Luer systems			(„Butterfly“ principle, 350 mm and 120 mm long)	(„Butterfly“ principle, 300 mm long)
<b>Sterile</b>	<b>Sterile</b>	<b>Sterile</b>	<b>Sterile</b>	<b>Sterile</b>	<b>Sterile</b>
<b>Item no. 100150</b> KABEVETTE® N Hcy 772 N 3.5	<b>Item no. 072501</b> AM 38 SV	<b>Item no. 072510</b> AM 38 K yellow SV	<b>Item no. 090701</b> K 0.9 x 40 yellow	<b>Item no. 072530</b> AM 38 BF yellow SV 350	<b>Item no. 090714</b> „Butterfly“ BF green 300 security
		<b>Item no. 072511</b> AM 38 K green SV	<b>Item no. 090704</b> K 0.8 x 40 green	<b>Item no. 072531</b> AM 38 BF green SV 350	
		<b>Item no. 072512</b> AM 38 K black SV		<b>Item no. 072535</b> AM 38 BF yellow SV 120	
				<b>Item no. 072536</b> AM 38 BF green SV 120	
Packing unit: 50 pcs in bag 500 pcs in despatch box	Packing unit: 100 pcs in bag 3,000 pcs in despatch box	Packing unit: 100 pcs in bag 3,000 pcs in despatch box	Packing unit: 100 pcs in dispenser box	Packing unit: 100 pcs in bag 1,000 pcs in despatch box	Packing unit: 100 pcs in bag 1,000 pcs in despatch box

# KABE LABORTECHNIK – because health is a matter of trust!



## Complete range of products supplied by KABE LABORTECHNIK GmbH:

- Prepared blood collection
- Multiple sampling adapters
- Cannulae
- Prepared test tubes and reaction vessels
- Pre-filled blood-sugar vessels
- Capillary blood collection
- Untreated tubes and test vessels
- Serum/plasma filter and distributors
- Urine cups
- Urine collection
- Urine collection bottles
- Faeces tubes
- Cuvettes
- Pipette tips
- Dropper pipettes
- Glass and plastic capillaries with accessories
- Sedimentation racks
- Racks for test tubes and reaction vessels
- Unstoppers
- Blood lances
- Stirring spatulae
- Disposal bags
- Tissue embedding cassettes
- Pathology vessels
- Despatch containers
- Mixers for blood samples
- Glucose analyser
- Blood sedimentation instruments
- Flabs for teletherapy
- Flabs for afterloading therapy

**Please ask for our complete catalogue.**

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