



## User information: Assay Request Information

### VITAMIN K<sub>1</sub> and VITAMIN K<sub>1</sub> EPOXIDE

**SAMPLE REQUIRED: 2ml serum**

The blood should ideally be collected after an overnight fast. Venous blood (4-5ml) should be collected from a peripheral vein into plain tubes or tubes containing a suitable anticoagulant, or Heparin. The Tube then needs to be inverted ~10 times to ensure anticoagulation. DO NOT SHAKE. Whole blood collected into sealed vacuum tubes can be stored at 4°C for 24-48 hours.

**PROTECT COLLECTED SAMPLES FROM STRONG LIGHT, AS VITAMIN K IS LIGHT SENSITIVE.**

Separate the serum/plasma from red blood cells by centrifugation (2300 rpm, 10min).

Plasma is **not** suitable  
Whole blood is **not** suitable.

### SUPERWARFARIN, RODENTICIDE, WARFARIN (and Enantiomers)

**SAMPLE REQUIRED: 2ml serum or plasma**

Venous blood (4-5ml) should be collected from a peripheral vein into plain tubes or tubes containing a suitable anticoagulant, EDTA or Heparin. The Tube then needs to be inverted ~10 times to ensure anticoagulation. DO NOT SHAKE.

Whole blood collected into sealed vacuum tubes can be stored at 4°C for 24-48 hours. Separate the serum/plasma from red blood cells by centrifugation (2300 rpm, 10min).

Whole blood is **not** suitable.

### (total) Homocysteine

**SAMPLE REQUIRED: 2ml serum or plasma**

The blood should ideally be collected after an overnight fast. Venous blood (4-5ml) should be collected from a peripheral vein into plain tubes or tubes containing a suitable anticoagulant, EDTA or Heparin. The Tube then needs to be inverted ~10 times to ensure anticoagulation. DO NOT SHAKE.

**Whole blood should be put on ice immediately.**

Separate the serum/plasma from red blood cells by centrifugation (2300 rpm, 10min) no longer than **4 hours** after taking blood.

Plasma must be removed from the red cells at the earliest opportunity. Failure to comply will result in over estimation of homocysteine concentration.

Whole blood is **not** suitable.

### Tetrahydrofolate and 5-methyltetrahydrofolate

**SAMPLE REQUIRED: 2ml whole blood**

Venous blood should be collected from a peripheral vein into a tube containing EDTA. The tube needs to be inverted ~10 times to ensure proper anticoagulation. DO NOT SHAKE.

Whole blood needs to be frozen at -20°C.

**PROTECT COLLECTED SAMPLES FROM LIGHT, AS TETRAHYDROFOLATE AND 5-METHYLTETRAHYDROFOLATE ARE LIGHT SENSITIVE.**

### Methylmalonic Acid (functional marker of vitamin B<sub>12</sub> status)

**Sample required: 2ml serum or plasma**

Venous blood (4-5 ml) should be collected from a peripheral vein into a plain tube or a tube containing EDTA. The tube then needs to be inverted 8-10 times to ensure proper anticoagulation. Whole blood should be put on ice immediately.

Separate the serum/plasma from the red blood cells by centrifugation (2300 rpm for 10 minutes).

Serum or EDTA samples ONLY.

Whole blood is **not** suitable.

### PIVKA II (functional marker of vitamin K status)

**SAMPLE REQUIRED: 0.5ml serum**

Venous blood (1-2 ml) should be collected from a peripheral vein into plain tubes (no anticoagulant).

Separate the serum from the red blood cells by centrifugation (2300 rpm for 10 minutes).

Plasma is **not** suitable  
Whole blood is **not** suitable.

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