



UMD Tubes

Instructions for collection, storage and shipping of liquid samples

The delivered sample storage containers, *UMD Tubes*, are designed for the storage of **0.4ml to 2.0ml** freshly collected clinical samples. Liquid samples that can be stored using *UMD Tubes* include **EDTA- or citrate-stabilised whole blood, bronchoalveolar lavage (BAL), ascites fluid, cerebrospinal fluid (CSF), pleural fluid, and synovial fluid**. The *UMD Tubes* contain glycerol as a means of protecting cells from rupture by freezing.

Because of the universal nature and the extreme sensitivity of detection of the assay, sampling is a critical step for the downstream molecular analysis of bacterial and fungal infectious agents. The national guidelines for the sterilisation of the skin surface in the area of puncture should be followed carefully in order to prevent false positive signal generation from the amplification of sequences of skin micro-organisms.

Storage and Stability

The UMD-Tubes (without samples) are stable at room temperature (+18 to +25°C) for 36 month.

Immediately store the sample filled UMD-Tubes at -70 to -80°C. The filled tubes are stable up to 6 month.

Material:

- Sterile syringe
- For blood sampling: commercial, sterile blood collection tubes with anti-coagulant (not supplied, e.g. K-EDTA S-Monovette series, Sarstedt, Germany).
- Laminar flow workstation. Sterilise and UV-irradiate before starting to decontaminate from cells and DNA. UV must be switched off during working. Follow the instructions of the manufacturer.
- 1x vortexer.
- Consumables: precision pipette and sterile pipette tips (1000µl) for pipetting liquid sample into the *UMD Tubes*; disposable lab coats, gloves, sleeves, Bouffant covers; waste container for plastics and liquid waste (blood).

Instructions:

- Sterilise skin surface in the area of puncture.
- Collect the liquid sample with a sterile syringe or a sterile commercial collection system.
- For blood sampling use collection tubes with anti-coagulant. Invert the blood collection tube several times to mix. **Clotted blood cannot be used.**
- Transfer samples directly to *UMD Tubes* under sterile conditions or transport the syringe or the collection tube to the laboratory for immediate processing.
- Pipette 0.4ml to 2.0ml liquid sample into the *UMD Tubes* under sterile conditions (work under a laminar flow workstation); use only sterilised consumables and gloves to prevent contaminations.

Do not overload the UMD Tubes, use only 2.0ml at maximum!

- Vortex the *UMD Tube* at full speed for 10 to 15 seconds. It is very important to mix the sample with the glycerol until homogenisation is reached.
- Record the displayed sample ID on the tube or mark the tube with your own sample ID
- Immediately store the filled *UMD Tube* at -70°C to -80°C up to 6 month.
- Ship samples in *UMD Tubes* on dry ice in an appropriate polystyrene box. Please use 5kg dry ice per day of shipping.