S-Monovette® GlucoEXACT
Information for the Laboratory

Reliable diagnosis of diabetes and gestational diabetes

- Conforms to DDG*/DGGG** guidelines on gestational diabetes
- Ultra-fast glycolysis inhibition with fluid preparation
- Optimal glucose stabilisation up to 96 h
- Protects against misdiagnosis
- Citrate/Fluoride is recommended for diabetes screening
The pre-analytic conditions applying to glucose determination in venous blood are of great significance for increasing glycolysis. In order to inhibit glycolysis reliably and immediately, the guidelines on gestational diabetes issued by the professional societies, the DDG* and the DGGG**, recommend adding a glycolysis inhibitor consisting of a mixture of fluoride and citrate to the samples. The DDG now also recommends carrying out diabetes screening with a blood collection tube prepared with citrate/fluoride. The American Diabetes Association also recommends immediate glycolysis inhibition.

The S-Monovette® GlucoEXACT exceeds the requirements of the DDG*/DGGG** guidelines by a factor of two (2 x 48 h) and immediately stabilises the glucose concentration for up to 96 h at room temperature. The Effective glycolysis inhibition in venous whole blood using the S-Monovette® GlucoEXACT was evaluated in an independent high-throughput laboratory up to 48 h and, in a recent validation, for up to 96 h at room temperature.7

**Applications**
The S-Monovette® GlucoEXACT is suitable for determining the glucose concentration in plasma using the hexokinase and glucose-oxidase method (GOD-PAP). Other methods and analyses require individual approvals.

**Preparation**
The mixture of citrate and fluoride ensures immediate and long-lasting glycolysis inhibition and conforms to the guidelines of the DDG*/DGGG**. The pH-dependent enzymes of glycolysis are inhibited due to citrate acidification (enzyme: hexokinase, phosphofructokinase). Fluoride as a glycolysis inhibitor ensures long-lasting inhibition of glucose degradation (enzyme: enolase).

The fluid preparation ensures effective glycolysis inhibition in whole blood due to optimal solubility. The stable glucose level can be determined in the plasma after centrifugation.
Precision through Stability

The S-Monovette® GlucoEXACT can be reliably stabilised up to an impressive 96 h at room temperature. The citrate fluoride solution in the S-Monovette® mixes directly with the blood during the blood collection process. The mixing process is usually completed by inverting the tube three times. Precise filling of the S-Monovette® GlucoEXACT guarantees reliable sample quality and accurate pre-analytics. In order to obtain an accurate result, the S-Monovette® GlucoEXACT must be filled precisely.

Plasma glucose level and multiplication factor:
The plasma glucose value (raw glucose value) determined must be multiplied by a factor of 1.16 due to blood thinning caused by the fluid preparation. The multiplication factor is defined using the volume ratio of blood volume to preparation volume.

Ordering Information

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