

PERINATAL

Rapid assay for Fetomaternal Hemorrhage based on Flow Cytometry



FMH QuikQuant

Special features

- Detection of fetal hemoglobin (HbF) of as low as 0,06% fetal cells in maternal blood
- Results in 1 hour (20 minutes hands-on-time) with two single centrifuge steps
- For use with flow cytometer
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Applications

- Determination of Fetomaternal Hemorrhage
- Pregnancy with suspected RhD incompatibilities

Background information

Detection and quantification of fetal red blood cells (fRBCs) in maternal blood samples is essential for obstetrical management. Measurement of fRBCs is critical as the extent of Fetomaternal Hemorrhage (FMH), the transplacental passage of fRBCs into the maternal circulation, has consequences for further treatment of mother and child. Frequency and size of FMH is directly influenced by complications in abdominal trauma, suspected placental injury or after a caesarean section. Severe FMH may lead to intra-uterine death. In case of antigen incompatibility between mother and child FMH may result in respiratory problems or anaemia, like Haemolytic Disease of the Newborn. Adult RBC's contain a population of HbF (F-cells), which can differ between 0 and 14%. The F-cells can give a positive result in the Kleihauer-Betke acid-elution test or single HbF flow cytometry test. These F-cells may be the result of physiological variations during pregnancy or traits such as thalassemia, sickle cell anaemia or hereditary persistence of fetal haemoglobin. The detection (and thus enumeration) of fRBCs is used to calculate the extent of FMH, either in case of trauma with suspected placental injury or in the situation of a RhD incompatibility between the fetus and the mother. The amount of fRBCs is a measure for the prevention of hemolytic disease of the newborn using (prophylactic) anti-D therapy.

Principle of the FMH QuikQuant

The FMH QuikQuant uses an anti-Hemoglobin F monoclonal antibody and Propidium Iodide reagent. With less than 20 minutes of technologist time needed, FMH QuikQuant is a two step wash technique requiring about 1 hour to complete.

Item	Description	Package size	Product code
FMH QuikQuant [IVD] CE	Rapid assay for Fetomaternal Hemorrhage Quantification	100 tests	QQF-100

Related Products			
Item	Description	Package size	Product code
Fetal Cell Count™ Kit [IVD] CE	Complete assay for routine diagnosis of Fetomaternal Hemorrhage using anti-HbF and anti-CA	25 tests	IQP-363
FMH Kit ¹ [IVD] CE	FITC conjugated Anti-RhD reagent for determination of Fetomaternal Hemorrhage	100 tests	9447
FETALtro™ ² [IVD] CE and FDA cleared	Tri-level stabilized blood controls with known human fetal erythrocytes content in human adult blood	3 levels, two 2 mL vial each level	FH101
FETALtro™ ² [IVD] CE and FDA cleared	Tri-level stabilized blood controls with known human fetal erythrocytes content in human adult blood	3 levels, one 2 mL vial each level	FH102

[IVD] CE in vitro diagnostic medical device. The products are registered as IVD in the countries belonging to the European

¹ Distributed outside the UK for IBGRL (Bristol), UK

² Distributed for R&D Systems, USA