

Instructions for Non-invasive Cell-free Fetal Genotyping

- Have your physician inform our laboratory via e-mail about impending shipment regarding patient name, antigen type requested and gestational age before shipping the sample (ihdiagnostiek.dna@sanquin.nl).

Fetal genotyping	Minimal age of gestation	Sample requirements	Shipment restrictions
D, C, c, E	> 9 weeks but preference for ≥ 12 weeks negative result repeated >20 weeks	Mother: 30 mL in Streck tubes Father : 10 mL EDTA	Between 50 and 86 °F Transport < 6 days
K1	≥ 14 weeks negative result repeated >20 weeks	idem	Between 50 and 86 °F Transport < 6 days
HPA-1a	>17 weeks but preference ≥ 19 weeks negative result repeated >20 weeks	idem	Between 50 and 86 °F Transport < 6 days

- Collect at least 30 mL blood from the pregnant woman in 3 (THREE) STRECK tubes for maternal sample (10 ml/tube).
- Collect 10 mL of blood from the biological father in an EDTA anti-coagulated (purple top) tube and include with the maternal sample.
- STRECK tubes prevent degradation of maternal white blood cells, so the maternal DNA will not interfere with fetal genotyping assay. STRECK tubes are the “tiger top” (black/Yellow) tubes used by many of the companies in the U.S. for performing free fetal DNA testing for aneuploidies.



STRECK tube

- If STRECK tubes are not available at the place of collection, please e-mail us (ihdiagnostiek.dna@sanquin.nl), with a return mailing address and we will send the required STRECK tubes to your facility.
- When using the STRECK tubes, the material can be sent by regular courier. Ensure the arrival time will be within 6 days after drawing.
- Please ensure that the request forms ‘Non-invasive fetal genotyping’, which can be downloaded from the site (one for each parent), are completed.

- For HPA-1a and K1 typing a 2nd maternal sample in 3 STRECK tubes should be collected after 20 weeks gestation to confirm an initial result that indicates a negative antigen result for the fetus. In general this is not necessary for RhD, C, c, E typing.
- Ensure to fill out the billing address on the request form. After the test is performed, an invoice will be sent. Cost are approximately 800 euros, which includes (if needed in case of a negative result) confirmation of the isolation of fetal DNA with the paternal sample and with the 2nd maternal sample.

Helpful shipping instructions:

- Please send the blood samples by courier (Preferably FedEx Priority).
- Address information for shipping:
Sanquin Diagnostic Services - Immunohematology
Erythrocyte Serology Department - DNA (Q2)
Plesmanlaan 125
1066CX Amsterdam
The Netherlands
Phone: +31205123373
Fax: +31205123685