



Winnipeg Diagnostic Services Perinatal Testing Services

Fetal Genotyping from Maternal Plasma MB_PN-08

TEST DESCRIPTION

Blood group genotyping of fetal DNA is performed to predict the blood group antigen status of the fetus at high risk for Hemolytic Disease of the Fetus and Newborn (HDFN). Because cell-free fetal DNA is normally present in maternal blood plasma throughout pregnancy, a non-invasive venipuncture sample can be collected from the mother for testing without risk to the fetus.

Testing Schedule

- For RhD, Rhc, RhE and RhC antigens, submit mother's sample > 16 weeks gestation.
- For K (Kell) antigen, submit mother's sample > 28 weeks gestation.

SPECIMEN AND REQUISITION REQUIREMENTS

Specimen(s)

- Certain test criteria must be met prior to testing. Canadian Blood Services Laboratory Supervisor must be contacted prior to patient sample collection. Refer to **Fetal Genotyping from Maternal Plasma Testing Criteria and Instructions**
- Label specimen with the required minimum information: patient's last name, first name, PHIN or hospital number or other unique identifier, date of collection, facility name, and phlebotomist initials.

Complete Requisition (must include)

- Patient's last name, first name, date of birth and PHN or hospital number or other unique identifier.
- Expected date of delivery (EDD)
- Facility name
- Physician/health care provider name
- Phlebotomist name, classification, initials
- Date/time of collection
- Name, facility, address, contact number of individual to whom the report will be sent

Requisition(s)

- *International Blood Group Reference Laboratory Requisition*
- *Request for Perinatal Testing*
- *Guidance for Completion of International Blood Group Laboratory Requisition*
- *Fetal Genotyping on Maternal Plasma Testing Criteria and Instructions*
- *Consent for Release of Neonatal Test Results*

PRE-SHIPPING STORAGE

Must be kept at room temperature (18-30°C).

SHIPPING INSTRUCTIONS

For shipping instructions refer to **Fetal Genotyping on Maternal Plasma Testing Criteria and Instructions**

SEND TO

Canadian Blood Services
Winnipeg Centre
Perinatal Laboratory
777 William Ave.
Winnipeg, MB R3E 3R4
Tel: 204-789-1088
Fax: 204-789-1006