Fetal Genotyping from Maternal Plasma

**AB_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 on Maternal Plasma Collection Site Instructions_AB](#).
- Label specimen with the required minimum information: patient’s last name, first name, PHN or Unique Lifetime Identifier (ULI) and date of collection.

**Complete Requisition (must include)**
- Patient's Last name, First name, Date of Birth and PHN or ULI
- Expected date of delivery (EDD)
- Clinic and Health Care Provider Name. Complete address, phone and fax number
- Phlebotomist ID information
- Date of collection

**Requisition(s)**
- [International Blood Group Reference Laboratory Requisition](#)
- [Perinatal Testing For Red Blood Cell Serology](#)
- [Guidance for Completion of International Blood Group Laboratory Requisition](#)
- [Fetal Genotyping on Maternal Plasma Updates](#)
- [Fetal Genotyping on Maternal Plasma Collection Site Instructions](#)
- [Fetal Genotyping on MATERNAL PLASMA Maternal Fetal Medicine Instructions](#)
- [Consent for Release of Neonatal Test Results Form](#)

**PRE-SHIPPING STORAGE**

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

**SHIPPING INSTRUCTIONS**

For shipping instructions refer to [Fetal Genotyping on Maternal Plasma Collection Site Instructions](#)