**CHROMOSOME ANALYSIS, BLOOD**

### Orderable - G Blood Routine

**Turnaround Time:** 4 weeks  
**STAT:** 3-7 days

#### Alternate Name(s):
- Chromosomes
- Karyotype
- Banding
- G-Banding
- Prophase Banding
- High Resolution Banding

#### Specimen:
3-6 mL peripheral venous blood in a sterile, sodium heparin Vacutainer. If <3 mL is collected, it must be in a 3 mL Vacutainer to allow for appropriate sample to anticoagulant ratio.

Newborn babies: 1-2 mL of blood aseptically collected into blood chromosome media (see comments).

Cord Blood: May be collected in either blood chromosome media if <2 mL or in a sodium heparin Vacutainer if >2 mL.

#### Collection Information:
All blood specimens should be collected at room temperature (15-25°C) and sent to the laboratory within 24 hours (baby’s blood should be sent STAT for receipt within the same day). Do not freeze, heat, open or separate sample (must maintain sterility). Lithium heparin or EDTA specimens are unacceptable. All specimens should contain at least two patient identifiers.

**Note:** FISH is a special procedure and the reason for request must be indicated on the requisition.

#### Reference Ranges:
See report

#### Interpretive Comments:
See requisition for common clinical indicators.

**Special Processing:**

*Do not freeze, open or separate sample (must maintain sterility).*

**Comments:**

Solution for Specimen Collection:
Contact the Cytogenetics Laboratory in advance for sterile aliquots of blood chromosome media for collection of baby’s blood. This media may be frozen, and thawed at room temperature (15-25°C) as needed. Media must be used by the expiry date written on the tube.
The Cytogenetics Laboratory is staffed from 0700-1700 (Monday-Friday), ext. 78974, or 75714 (lab).

For additional information please refer to the [Molecular Diagnostics Laboratory](#).

**Critical Information Required:**

Baby’s blood should be received by the laboratory within the same day.

The Cytogenetics Laboratory at LHSC/SJHC will stop microscopic chromosome analysis (G-banding) as a first-line test on all patients eligible for microarray testing.

**Storage and Shipment:**

If unable to transport immediately, store at 4°C and transport at room temperature (15-25°C) within 24 hours.