Chromosome Analysis – Chorionic Villus Sampling

CPT Code(s): 88235, 88267, 88280, 88285

Service Code (IU Health): 53101267, 53100608, 53100715, 53100764

Ordering Recommendation: Prenatal (fetal) analysis of chorionic villus sampling is a useful diagnostic method for identifying fetal chromosomal abnormalities. This method is used for detection of genetic chromosomal abnormalities in patients with family history of genetic abnormality, abnormal prenatal screening, or abnormal fetal ultrasound. Companion fluorescence in-situ hybridization (FISH) testing for prenatal aneuploidy screening (13, 18, 21, X, Y) may also be performed. No additional specimen is required.

Synonyms: Karyotype, G-bands, CVS, prenatal diagnosis, prenatal chromosomes.

Methodology: Tissue culture, microscopic analysis of G-banded chromosomes. If ordered, fluorescence in-situ hybridization (FISH) of interphase cells.

Performed: Monday through Saturday

Reported: 7-10 days

Specimen Requirements

Collect: In sterile, screw-top container filled with sterile transport medium (provided upon request).

Specimen Volume: 20-30 mg (50 mg, if FISH testing also requested).

Storage/Transport: Refrigerate.


Remarks: Physician/genetic counselor may be contacted if preliminary report exceeds 9 days. There may be a higher rate of pregnancy loss after procedure as compared to amniocentesis.

Stability: Ambient: 24 hours; Refrigerated: 48 hours; Frozen: Unacceptable
Interpretive Data

**Characteristics:**
Negative: A 46,XX or 46,XY karyotype indicating no apparent chromosomal abnormality is considered negative.
Positive: Identification of any numerical or structural chromosomal abnormality. A report detailing interpretation of results will be provided.

**Limitations:** This does not eliminate the possibility of low frequency mosaicism or small structural abnormalities. Living cells are required for chromosome analysis. As such, sample quality can affect the turnaround time. There is a possibility of contamination by maternal cells in this procedure. A normal karyotype, i.e. 46,XX or 46,XY with no apparent chromosome abnormality, does not eliminate the possibility that the birth defect may be caused by submicroscopic cytogenetic lesions, molecular mutations, and/or environmental factors such as exposure to teratogens.