Lab Dept: Anatomic Pathology

Test Name: COMPARATIVE GENOMIC HYBRIDIZATION (CGH)

**General Information**

**Lab Order Codes:**
- CGH: Full assay (full charge)
- CGHL: Limited assay, known pathologic mutation (limited charge)
- CHGV: Variant of unknown significance (no charge)

Correct assay order should be based on clinical findings.

**Synonyms:**
Comparative Genomic Hybridization, Microarray; aCGH

**CPT Codes:**
- CGH:
  - 88230 – Tissue culture for non-neoplastic disorders; lymphocyte
  - 81228 – Cytogenomic constitutional microarray analysis
- CGHL:
  - 88230 – Tissue culture for non-neoplastic disorders; lymphocyte
  - 81228 – Cytogenomic constitutional (genome-wide) microarray analysis; interrogation of genomic regions for copy number variants

**Test Includes:**
For characterization of abnormalities detected by G-banding.

**Logistics**

**Test Indications:**
FISH for detection of small duplications and deletions in patients with normal G-banded karyotypes.

**Lab Testing Sections:**
Anatomic Pathology - Sendouts

**Referred to:**
Fairview University Medical Center – Cytogenetics Lab
FV CGH Test: ECYHLD-99
FV CGHV Test: ECYHLD-27
FV CGH Test: ECYHLD-29

**Phone Numbers:**
- MIN Lab: 612-813-6280
- STP Lab: 651-220-6550

**Test Availability:**
Daily, 24 hours

**Turnaround Time:**
Performed Monday-Friday. Results are reported within 28 days.

**Special Instructions:**
Please see Container and Draw Volume

**Specimen**
**Specimen Type:** Whole Blood

**Container:** Green (sodium heparin, no gel) **AND** Lavender (EDTA) top tubes

**Note:** Both tubes are required.

**Note:** A Yellow (ACD) tube can be substituted for the Lavender top tube.

**Draw Volume:** 20 mL (10 mL per tube) (Minimum: 10 mL [5 mL per tube]) blood

**Note:** 1-3 mL per tube Minimum for infants and children, with 3 mL strongly preferred

**Processed Volume:** Same as Draw Volume

**Collection:** Routine blood collection

**Special Processing:** Lab Staff: Do Not Centrifuge. Specimen should remain in the original collection container. Store and ship at room temperature. Forward promptly to reference lab.

**Patient Preparation:** None

**Sample Rejection:** Clotted or frozen sample; mislabeled or unlabeled specimens

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**Interpretive**

**Reference Range:** Interpretive report

**Critical Values:** N/A

**Limitations:** Post-natal studies only.

**Methodology:** FISH - Fluorescence in-situ hybridization

**References:** Fairview Diagnostic Laboratories – Cytogenetics Lab January 2018

**Updates:**
- 4/7/2008: Specimen requirements changed to include both Sodium Heparin and EDTA/ACD blood.
- 5/2/2008: CPT change from 88385x2 to 88271x2
- 7/22/2010: CPT update
- 2/15/2011: CPT update
- 2/4/2013: CPT update
- 8/19/2015: CPT update
- 4/11/2018: CPT update