Lab Dept: Anatomic Pathology

Test Name: CGH WITH SNP

General Information

Lab Order Codes: SNPA

Synonyms: CGH with Single Nucleotidase Polymorphism Array; Comparative Genomic

Hybridization (CGH) with Single Nucleotide Polymorphism (SNP array); Chromosomal Microarray (Copy Number/SNP); Congenital/Constitutional

SNP

CPT Codes: 81229 – Cytogenomic constitutional (genome-wide) microarray analysis;

interrogation of genomic regions for copy number and single nucleotide

polymorphism (SNP) variants for chromosomal abnormalities

88230 – Tissue culture for non-neoplastic disorders; lymphocyte

88233

Test Includes: An interpretive report of findings.

Logistics

Test Indications: For detection of small duplications and deletions in patients with normal G-

banded karyotypes. For characterization of abnormalities detected by G-

banding.

Lab Testing Sections: Anatomic Pathology – Sendouts

Referred to: University of Medical Center Fairview Cytogenetics (UM Test Code:

LAB6575/CGHSNP)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily

Turnaround Time: Results within 28 days

Special Instructions: For optimal testing results the specimen must arrive within 24 hours of

collection.

Specimen

Specimen Type: Whole blood

Cord blood, Products of Conception or Skin are also acceptable specimen

types.

Container: Green (NaHeparin; no gel) top tube AND Purple (EDTA) top tube

Note: Both tubes are required.

Alternate: Yellow (ACDA) can be used instead of the EDTA.

Draw Volume: Optimal volume: 10 mL blood:

5 mL blood in Green NaHeparin (no gel) AND 5 mL blood in Purple (EDTA)

Minimum volume: 6 mL blood:

3 mL blood in Green NaHeparin (no gel) AND 3 mL blood in Purple (EDTA)

(Note: 1-3 mL in each tube will be accepted for infants and small children)

Products of Conception (POC)/Skin: Portion of placenta at least 1 cm3

containing 35-55 mg of Villi in sterile plastic leakproof container.

Skin, cord or fetal tissue: 3-4 mm punch skin biopsy If obtained at autopsy, at least 1 cm3 including dermis in sterile plastic leakproof

container.

Processed Volume: Same as Draw Volume

Collection: Routine venipuncture

Special Processing: Lab Staff: Do Not Centrifuge. Blood specimen should remain in the original

collection container. Store and ship at ambient temperature. Avoid freezing.

Patient Preparation: None

Sample Rejection: Clotted or frozen specimen; mislabeled or unlabeled specimens; incorrect

container type

Interpretive

Reference Range: An interpretive report will be provided.

Critical Values: N/A

Limitations: Post-natal specimens only.

Specimens must be received in the Cytogenetics Laboratory Mon-Fri by 5:30 pm; weekends and holidays by 4:30 pm. Specimens received after

these cutoffs will be processed the following day.

Methodology: Copy Number and SNP Chromosomal Microarray (CMA)

References: Fairview Diagnostic Laboratories January 2023

Updates: 7/21/2017: CPT update

3/13/2023: Updated synonyms, CPT codes, minimum volumes, specimen viability/stability, acceptable specimen types and reference laboratory

receiving limitations.