Lab Dept: Anatomic Pathology

Test Name: UNIPARENTAL DISOMY CHROMOSOME 14

General Information

Lab Order Codes: UPD14

Synonyms: UPD Testing for chromosome 14

CPT Codes: 81402 – Uniparental disomy (UPD) (eg, Russell-Silver syndrome, Prader-Willi/Angelman syndrome), short tandem repeat (STR) analysis

Test Includes: Testing of child and both parents.

Logistics

Test Indications: Uniparental disomy (UPD) describes a condition in which both homologs of a chromosome pair are derived from the same parent. UPD can be associated with phenotypic abnormalities if:

- The chromosome or chromosome segment involved carries genes that are imprinted. Genomic imprinting refers to the differential expression of alleles as determined by the parental origin of the allele.
- Homozygosity due to uniparental isodisomy results in the expression of an autosomal recessive condition from a single carrier parent.

Lab Testing Sections: Anatomic Pathology - Sendouts

Referred to: University of Chicago Genetic Services Laboratory (UCHI test: 1301)

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

Test Availability: Daily, 24 hours

Turnaround Time: 2 - 4 weeks

Special Instructions: EDTA blood from both parents and the child is required.

Specimen

Specimen Type: Whole blood
Container: Lavender top (EDTA) tube x3

Draw Volume: 10 mL (Minimum: 3 mL) blood from child and both parents

Processed Volume: Same as Draw Volume

Collection: Routine blood collection

Special Processing: Lab Staff: Do Not centrifuge. Send specimens in original collection containers via overnight shipping. Store and ship at room temperature. Forward promptly.

**Note:** Specimens can only be shipped Monday through Thursday. Specimens will not be processed at the University of Chicago on weekends or holidays. Hold specimens collected on weekends and holidays at refrigerated temperatures and ship at ambient temperatures on the next business day, Monday – Thursday.

Patient Preparation: None

Sample Rejection: Specimens older than 48 hours, mislabeled or unlabeled specimens

**Interpretive**

Reference Range: Narrative report

Methodology: Microsatellite analysis

References: University of Chicago Genetic Services Laboratory Web Page March 2018

Phone: 888-824-3637

Updates: 1/15/2013: CPT update

3/7/2018: Updated method