Lab Dept: Anatomic Pathology

Test Name: MULTIPLE EPIPHYSEAL DYSPLASIA (MED)

**KNOWN MUTATION** 

## **General Information**

**Lab Order Codes:** MEDGK (Blood)

**Synonyms:** MED Known familial mutation, COMP gene

**CPT Codes:** 81403 – Molecular Pathology procedure, Level 4

**Test Includes:** Testing of a relative for a specific known mutation (carrier testing) where

testing was previously done on family member(s). The previously tested

proband DNA serves as a positive control.

## Logistics

**Test Indications:** Multiple epiphyseal dysplasia is a clinically and genetically heterogeneous

chondrodysplasia with either autosomal dominant or recessive inheritance. The phenotypic spectrum ranges from mild to severe. Patients usually present with joint pain and stiffness, waddling gait and/or mild short stature in childhood. Some patients, however, remain asymptomatic until adult age and present with early-onset osteoarthritis of the large weight-bearing joints. Typical radiographic findings include delayed and irregular ossification of the epiphyses in multiple joints. Spinal changes, if present, are mild.

Mutation in five different genes, cartilate oligometric metrix protein (COMP), collagen IX (COL9A1, COL9A2 and COL9A3) and matrilin-3 (MATN3) can cause the autosomal dominantly inherited forms for MED. Mutations in the diastrophic dysplasia sulfate transporter gene (DTDST or SLC26A2) can

cause the recessively inherited form of the disorder.

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

**Referred to:** Connective Tissue Gene Tests Lab (CTGT test)

**Phone Numbers:** MIN Lab: 612-813-6280

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

Turnaround Time: 3 weeks

**Special Instructions:** A requisition form must be sent with any specimen. Forms can be obtained

through the following link:

**CTGT** Requisition

Select Known Familial Mutation and indicate the mutation on the form.

Specimen

Specimen Type: Whole blood

**Container:** Lavender top (EDTA) tube

**Draw Volume:** 6 mL (Minimum: 3 mL) blood

**Processed Volume:** Same as Draw Volume

**Collection:** Routine venipuncture for blood specimens, invert gently to mix

**Special Processing:** Lab Staff: Do Not centrifuge. Send whole blood in original collection. Store

at refrigerated temperatures. Ship at room temp.

**Note:** Specimens stable approximately one week at refrigerated temp.

Patient Preparation: None

Sample Rejection: Mislabeled or unlabeled specimens

Interpretive

Reference Range: Interpretive report

Critical Values: N/A

Limitations: N/A

**Methodology:** Sequence analysis

References: Connective Tissue Gene Tests Lab Web Page October 2014

phone: (484)244-2900 fax: (484)244-2904

**Update:** 2/7/2013: CPT update

10/29/2014: Added minimum draw volume.