

TEST CHANGE

Chromium, Serum

0098830, CR S

Specimen Requirements:

Patient Preparation: Diet, medication, and nutritional supplements may introduce interfering substances. Patients should be encouraged to discontinue nutritional supplements, vitamins, minerals, and ~~nonessential~~~~non-essential~~ over-the-counter medications (upon the advice of their physician).

Collect: Royal ~~blue (no additive)~~Blue (No Additive).

Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 2 mL serum to an ARUP Trace Element-Free Transport Tube (ARUP supply #43116) available online through eSupply using ARUP Connect(TM) or contact ARUP Client Services at ~~(800-) 522-2787~~ (Min: 0.5 mL). Do not use utensils (i.e., syringes, needles, or pipettes) in the collection or transfer of the sample, pour directly into transport tube.

Transport Temperature: Room temperature. Also acceptable: Refrigerated or frozen.

Unacceptable Conditions: Plasma. Royal ~~b~~Blue (EDTA) or separator tubes. Specimens that are not separated from the clot within 2 hours. Specimens transported in tubes other than specified.

Remarks:

Stability: Ambient: Indefinitely; Refrigerated: Indefinitely; Frozen: Indefinitely

Methodology: Quantitative Inductively Coupled Plasma-Mass Spectrometry

Performed: Sun-Sat

Reported: 1-3 days

Note:

CPT Codes: 82495

New York DOH Approval Status: This test is New York DOH approved.

Interpretive Data:

Elevated results may be due to skin or collection-related contamination, including the use of a noncertified metal-free collection/transport tube. If contamination concerns exist due to elevated levels of serum chromium, confirmation with a second specimen collected in a certified metal-free

tube is recommended.

Serum chromium levels can be significantly higher in patients with metal-on-metal total hip replacement implants than in control patients without metal implants. Serum chromium levels may be increased in asymptomatic patients with metal-on-metal prosthetics and should be considered in the context of the overall clinical scenario. Whole blood is the specimen type recommended by the U.S. Food and Drug Administration for assessing the risks of metal-on-metal hip implants in symptomatic patients.

Symptoms associated with chromium toxicity vary based on route of exposure and dose, and may include dermatitis, impairment of pulmonary function, gastroenteritis, hepatic necrosis, bleeding, and acute tubular necrosis.-

~~This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.~~

Reference Interval:

Less than or equal to 5.0 µg/L