

TEST CHANGE

Cobalt, Whole Blood

0099231, COBALT B

Specimen Requirements:

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

Collect: Royal blue (K2EDTA) or royal blue (NaHep).

Specimen Preparation: Transport 3 or 6 mL whole blood in the original collection tube. (Min: 0.5 mL)

Transport Temperature: Room temperature. Also acceptable: Refrigerated.

Unacceptable Conditions: Specimens collected in tubes other than royal blue (K2EDTA) or royal blue (NaHep). Clotted specimens.

Remarks:

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

Methodology: Quantitative Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)

Performed: Sun-Sat

Reported: 1-3 days

Note:

CPT Codes: 83018

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 blood cobalt, confirmation with a second specimen collected in a certified metal-free tube is recommended.~~

Blood cobalt levels can be used in the assessment of occupational exposure or toxic ingestion. Symptoms associated with cobalt toxicity vary based on route of exposure and may include cardiomyopathy, allergic dermatitis, pulmonary fibrosis, cough and dyspnea. Blood is the preferred

specimen type for evaluating metal ion release from metal-on-metal joint arthroplasty.

Elevated results may be due to skin- or collection-related contamination, including the use of tubes that are not certified to be trace element free. If an elevated result is suspected to be due to contamination, confirmation with a second specimen collected in a certified trace element-free tube is recommended.

Methodology: Inductively Coupled Plasma-Mass Spectrometry (ICP-MS).

Reference Interval:

Less than or equal to ~~0-5~~ 3.9 µg/L