

Reporting Title: Cobalt, S**Performing Location:** Rochester**Ordering Guidance:**

The US Food and Drug Administration recommended test for monitoring cobalt in patients with metal-on-metal implants is COWB / Cobalt, Blood.

This test should not be ordered to assess vitamin B12 activity. For that assessment see B12 / Vitamin B12 Assay, Serum or ACASM / Pernicious Anemia Cascade, Serum.

Specimen Requirements:

Patient Preparation: High concentrations of gadolinium and iodine are known to interfere with most metal tests. If either gadolinium- or iodine-containing contrast media has been administered, a specimen should not be collected for 96 hours.

Supplies: Metal Free Specimen Vial (T173)

Collection Container/Tube: Plain, royal blue-top Vacutainer plastic trace element blood collection tube

Submission Container/Tube: 7-mL Mayo metal-free, screw-capped, polypropylene vial

Specimen Volume: 0.5 mL

Collection Instructions:

1. Allow the specimen to clot for 30 minutes; then centrifuge the specimen to separate serum from the cellular fraction.
2. Remove the stopper. Carefully pour specimen into a Mayo metal-free, polypropylene vial, avoiding transfer of the cellular components of blood. Do not insert a pipet into the serum to accomplish transfer, and do not ream the specimen with a wooden stick to assist with serum transfer.
3. See Metals Analysis Specimen Collection and Transport for complete instructions.

Specimen Minimum Volume:

0.3 mL

| Specimen Type | Temperature | Time | Special Container |
|---------------|--------------------------|---------|-------------------|
| Serum | Refrigerated (preferred) | 28 days | METAL FREE |
| | Ambient | 28 days | METAL FREE |
| | Frozen | 28 days | METAL FREE |

Result Codes:

| Result ID | Reporting Name | Type | Unit | LOINC® |
|-----------|----------------|---------|-------|--------|
| 80084 | Cobalt, S | Numeric | ng/mL | 5627-5 |

LOINC and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

CPT Code Information:

83018

Reference Values:

<1.0 ng/mL

<10.0 ng/mL (Metal-on-metal implant)

Reference values apply to all ages.

The reported unit of measurement for cobalt of ng/mL is equivalent to mcg/L.