MAYO CLINIC LABORATORIES

# Test Definition: CRS

Chromium, Serum

**Reporting Title:** Chromium, S
**Performing Location:** Rochester

## Ordering Guidance:

The US Food and Drug Administration recommended test for monitoring chromium in patients with metal-on-metal implants is CRWB / Chromium, Blood.

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

## Result Codes:

| Result ID | Reporting Name | Type | Unit | LOINC® |
|---|---|---|---|---|
| 8638 | Chromium, S | Numeric | ng/mL | 5622-6 |

**LOINC® and CPT codes are provided by the performing laboratory.**

## Supplemental Report:

No

## CPT Code Information:

82495

## Reference Values:

<0.3 ng/mL

When collected by a phlebotomist experienced in ultra-clean collection technique and handled according to the

instructions in Metals Analysis Specimen Collection and Transport, we have observed the concentration of chromium in serum to be below 0.3 ng/mL. However, the majority of specimens submitted for analysis from unexposed individuals contain 0.3 ng/mL to 0.9 ng/mL of chromium. Commercial evacuated blood collection tubes not designed for trace-metal specimen collection yield serum containing 2.0 ng/mL to 5.0 ng/mL chromium derived from the collection tube.