Lab Dept: Chemistry

Test Name: REVERSE T3

General Information

Lab Order Codes: RT3

Synonyms: Triiodothyronine, Reverse; Reverse Triiodothyronine; T3, Reverse

CPT Codes: 84482 – Triiodothyronine T3; reverse

Test Includes: Reverse T3 level reported in ng/dL.

Logistics

Test Indications: Reverse T3 (rT3) differs from thyroid hormones in that it has no effect on metabolic rate and indeed may be a waste product. Patients with abnormalities of energy metabolism may also show significant variations in serum rT3 levels. Caloric deprivation (fasting) usually results in higher concentrations of rT3, as do various systemic diseases involving fever. This appears to result from the conversion of T4 to rT3 being favored at the expense of T3 production. Hence, rT3 measurements may be useful in the diagnosis of the Sick Euthyroid Syndrome. Most drugs that affect thyroid function also change rT3 levels.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Mayo Clinic Laboratories (Mayo: RT3)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: Results within 6 days, performed Wednesday and Friday

Special Instructions: N/A

Specimen

Specimen Type: Blood

Container: SST (Marble, gold or red) top tube

Draw Volume: 2.4 mL (Minimum: 1.2 mL) blood

Processed Volume: 0.8 mL (Minimum: 0,4 mL) serum

Collection: Routine Venipuncture

Special Processing: Lab Staff: Centrifuge specimen. Aliquot serum into a screw top plastic vial. Store and ship at refrigerated temperatures. Forward to reference laboratory.

Patient Preparation: None

Sample Rejection: Unlabeled or mislabeled specimens; gross hemolysis

Interpretive

Reference Range:

Age:	Reference Range:
All ages:	10 – 24 ng/dL

Critical Values: N/A

Limitations: Generally, reverse triiodothyronine tests are not necessary since triiodothyronine should not be ordered in hospitalized or sick patients.

This test was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the US Food and Drug Administration.

Methodology: Liquid Chromatography – Tandem Mass Spectrometry (LC-MS/MS)

References: Mayo Clinic Laboratories (July 2020)

Updates: 7/24/2013: Reference range update, units previously reported as pg/mL.
7/13/2020: Testing moved to Mayo, updated volumes and reference range.