MAYO CLINIC LABORATORIES

NEW TEST

Notification Date: March 5, 2024
Effective Date: April 4, 2024

T3 (Triiodothyronine), Free, Serum

Test ID: T3FR

Useful for:

A second- or third-level test of thyroid function

Confirmation of hyperthyroidism, supplementing the T4 (tetraiodothyronine), sensitive thyrotropin, and total T3 assays

Evaluating clinically euthyroid patients who have an altered distribution of binding proteins

Methods:

Electrochemiluminescence Immunoassay (ECLIA)

Reference Values:

Pediatric
0-1 month: 2.7-8.5 pg/mL
1-<12 months: 3.4-5.6 pg/mL
1-<14 years: 3.0-5.1 pg/mL
14-<19 years: 3.3-5.3 pg/mL

Adult (> or =19 years): 2.0-4.4 pg/mL

For International System of Units (SI) conversion for Reference Values, see www.mayocliniclabs.com/order-tests/si-unit-conversion.html

Specimen Requirements:

Supplies:	Sarstedt Aliquot Tube, 5 mL (T914)
Collection Container/Tube:	
Preferred:	Serum Gel
Acceptable:	Red top

Submission Container/Tube:	Plastic vial
Specimen Volume:	1 mL
Collection Instructions:	Centrifuge and aliquot serum into plastic vial.
Minimum Volume:	0.75 mL

Specimen Stability Information:

Specimen Type	Temperature	Time
Serum	Refrigerated (preferred)	14 days
	Frozen	30 days

Cautions:

Free T3 (triiodothyronine) is not a sensitive test for hypothyroidism.

In rare cases, some individuals can develop antibodies to mouse or other animal antibodies (often referred to as human anti-mouse antibodies [HAMA] or heterophile antibodies), which may cause interference in some immunoassays. The presence of antibodies to streptavidin or ruthenium can also rarely occur and may interfere in this assay. Caution should be used in interpretation of results, and the laboratory should be alerted if the result does not correlate with the clinical presentation.

Serum biotin concentrations up to 1200 ng/mL do not interfere with this assay. Concentrations up to 1200 ng/mL may be present in specimens collected from patients taking extremely high doses of biotin up to 300 mg/d. In a study among 54 healthy volunteers, supplementation with 20 mg/d biotin resulted in a maximum serum biotin concentration of 355 ng/mL 1-hour postdose.

CPT Code:

84481

Day(s) Performed: Monday through Saturday **Report Available:** 1 to 3 days

Questions

Contact Bethany Feind, Laboratory Resource Coordinator at 800-533-1710.