

Thyroxine (T4), Free

CPT Code: 84439

Order Code: C142

ABN Requirement: No

Synonyms: Free T4; Unbound T4; FT4

Specimen: Serum

Volume: 0.5 mL

Minimum Volume: 0.2 mL

Container: Gel-barrier tube (SST, Tiger Top)

Collection:

1. Collect and label sample according to standard protocols.
2. Gently invert tube 5 times immediately after draw. DO NOT SHAKE.
3. Allow blood to clot 30 minutes.
4. Centrifuge for 10 minutes.

Special Instructions: Samples should not be taken from patients receiving therapy with high biotin doses (>5 mg/day) until at least 8 hours following the last dose.

Transport: Store serum at 2°C to 8°C after collection and ship the same day per packaging instructions provided with the Cleveland HeartLab shipping box.

Stability:

Ambient (15-25°C): 5 days

Refrigerated (2-8°C): 7 days

Frozen (-20°C): 30 days

Causes of Rejection: Samples which are heat-inactivated; samples stabilized with azide; specimens other than serum; improper labeling; samples not stored properly; samples older than stability limits.

Methodology: Electrochemiluminescence Immunoassay (ECLIA)

Turn Around Time: 1 to 3 days

Reference Range:

Age	ng/dL
0-2 weeks	2.2-5.3
3 weeks-20 months	0.9-2.2
≥21 months	0.7-1.8

Intended Use: Free thyroxine is useful for the evaluation of thyroid function. It can be used in conjunction with a TSH test to define thyroid status and confirm diagnosis of hypo- and hyperthyroidism. The free thyroxine test can also be used for the evaluation of thyroid function in patients with TBG alterations, for the evaluation of individuals with goiter, to monitor treatment for hyperthyroidism and to aid in the diagnosis of infertility in women.

Limitations: Furosemide and Levothyroxine caused elevated FT4 results at daily therapeutic dosage levels. Patients receiving treatment with lipid-lowering agents containing D-T4 should stop treatment for 4-6 weeks prior to collecting sample. Autoantibodies to thyroid hormones can interfere with the assay. Binding protein anomalies seen with FDH (familial dysalbuminemic hyperthyroxinemia), for example, may cause values which, while characteristic of the condition, deviate from the expected results. In rare cases, interference due to extremely high titers of antibodies to analyte-specific antibodies, streptavidin or ruthenium can occur.

The CPT codes provided are based on AMA guidelines and are for informational purposes only. CPT coding is the sole responsibility of the billing party. Please direct any questions regarding coding to the payer being billed.