
Lab Dept: Chemistry

Test Name: T3 (TRIIODOTHYRONINE) TOTAL, SERUM

General Information

Lab Order Codes: TT3

Synonyms: T3R, Total T3, T3

CPT Codes: 84480 – Triiodothyronine T3; total (TT-3)

Test Includes: T3 concentration reported in ng/dL.

Logistics

Test Indications: T3 (Triiodothyronine) is produced by the thyroid and secreted in response to TSH. T3 is physiologically more potent than T4. 99.7% of T3 is bound to protein and acts as a reserve for the metabolically active free T3. T3 blood levels are useful in assessing hyperthyroidism.

Lab Testing Sections: Chemistry – Performed on the Minneapolis Campus

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hrs

Turnaround Time: 1 – 3 days (performed Monday – Friday)

Special Instructions: N/A

Specimen

Specimen Type: Blood

Container: SST(Gold, marble or red)
Alternate: Green (LiHep or NaHep), lavender (EDTA)

Draw Volume: 1.2 mL (Minimum: 0.5 mL) blood

Processed Volume: 0.4 mL (Minimum: 0.15 mL) serum
Note: Minimum volume does not allow for repeat testing or dilution.

Collection: Routine blood collection

Special Processing: Lab Staff: Centrifuge specimen, remove serum aliquot into a plastic sample cup. Store at 2 – 8 degrees Centigrade for up to 7 days..

Patient Preparation: None

Sample Rejection: Mislabeled or unlabeled specimen; gross hemolysis

Interpretive

Reference Range:

Age	Female Range (ng/dL)	Male Range (ng/dL)
4 days - <1 year:	84.6 - 234	84.6 - 234
1 - <12 years:	113 - 189	113 - 189
12 - <15 years:	97.7 - 176	97.7 - 176
15 - <17 years:	92.5 - 142	93.8 - 156
17 - <19 years:	89.8 - 168	89.8 - 168
Adults:	35 - 193	35 - 193

Critical Values: N/A

Limitations: Heterophile antibodies may interfere with immunoassay testing.

Methodology: Chemiluminescent MicroParticle Immunoassay (CMIA)

References: Abbott Architect TT2 Reagent Package Insert, Abbott Laboratories, Abbott Park, IL. Revised January 2014

Burtis, CA, Ashwood, ER, Bruns, DE, ed (2006) Tietz Textbook of Clinical Chemistry and Molecular Diagnostics, 4th Edition, Philadelphia, PA: WB Saunders

Jacobs and DeMott Laboratory Test Handbook (2001) 5th Edition, Lexicomp Inc

CALIPER Reference Ranges accessed 10/27/2020

Abbott Alinity i Total T3 Reagent Instructions for Use, Abbott Laboratories Diagnostics Division, Abbott Park, IL, 60064, April 2020

Abbott Alinity i Total T3 Calibrator Kit Package Insert, Abbott Laboratories Diagnostics Division, Abbott Park, IL, 60064, February 2020

Abbott AlinityTotal T3 Manual Diluent Insert, Abbott Laboratories
Diagnostics Division, Abbott Park, IL 60064, February 2018

Bio-Rad Liquichek Immunoassay Plus Quality Control Package Insert,
Bio-Rad Laboratories, Irvine, CA, April 2020

Updates:

2/9/2016: Update container types

5/15/2018: New method, updated reference ranges

11/19/2019: Updated availability and TAT.

12/7/2020: Updated for method Abbott Alinity