
Lab Dept: Chemistry

Test Name: THYROTROPIN (Trab) RECEPTOR ANTIBODY

General Information

Lab Order Codes: THYRO

Synonyms: Thyroid Stimulating Hormone (TSH) Receptor Antibody, Serum; TRAb/TBII

CPT Codes: 83520 – Immunoassay for analyte other than infectious agent antibody or infectious agent antigen; quantitative

Test Includes: Antibody titer reported in IU/L.

Logistics

Test Indications: Recommended first-line test for detection of thyrotropin receptor antibodies. Differential diagnosis of etiology of thyrotoxicosis in patients with ambiguous clinical findings and/or contraindicated or nondiagnostic thyroid radioisotope scans. Diagnosis of clinically suspected Graves disease in patients with normal thyroid function tests. Determining the risk of neonatal thyrotoxicosis in a fetus of a pregnant female with active or past Graves disease. Differential diagnosis of gestational thyrotoxicosis versus first trimester manifestation or recurrence of Graves disease. Assessing the risk of Graves disease relapse after antithyroid drug treatment.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Mayo Clinic Laboratories (Mayo test: THYRO)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 - 3 days, Test set up Monday - Saturday

Special Instructions: See [Patient Preparation](#)

Specimen

Specimen Type: Blood

Container:	Preferred: SST (Gold or marble) Alternate: Red NO GEL
Draw Volume:	3 mL (Minimum: 2.25 mL) blood
Processed Volume:	1 mL (Minimum: 0.75 mL) serum
Collection:	Routine blood collection
Special Processing:	Lab Staff: Centrifuge specimen, remove serum aliquot into a screw-capped round bottom plastic vial. Store and ship at refrigerated temperatures. Forward promptly. Specimen stable refrigerated (preferred) for 7 days, frozen for 90 days.
Patient Preparation:	For 12 hours before specimen collection do not take multivitamins or dietary supplements containing biotin (vitamin B7) which is commonly found in hair, skin, and nail supplements and multivitamins.
Sample Rejection:	Gross hemolysis; mislabeled or unlabeled specimens

Interpretive

Reference Range:	All Ages: ≤ 1.75 IU/L
Critical Values:	N/A
Limitations:	In rare cases, interference due to extremely high titers of antibodies to streptavidin and ruthenium can occur.
Methodology:	Electrochemiluminescence immunoassay
References:	Mayo Clinic Laboratories (February 2023)
Updates:	8/23/2021: Moved from Esoterix to Mayo. 2/20/2023: Updated preferred and acceptable specimen collection containers. Added specimen stability.