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**Lab Dept:** Chemistry

**Test Name:** THYROTROPIN (Trab) RECEPTOR ANTIBODY

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***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.

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***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](#)

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***Specimen***

**Specimen Type:** Blood

<b>Container:</b>	Preferred: Red NO GEL Alternate: SST (Gold or marble)
<b>Draw Volume:</b>	3 mL (Minimum: 2.25 mL) blood
<b>Processed Volume:</b>	1 mL (Minimum: 0.75 mL) serum
<b>Collection:</b>	Routine blood collection
<b>Special Processing:</b>	Lab Staff: Centrifuge specimen, remove serum aliquot into a screw-capped round bottom plastic vial. Store and ship at refrigerated temperatures. Forward promptly.
<b>Patient Preparation:</b>	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.
<b>Sample Rejection:</b>	Gross hemolysis; mislabeled or unlabeled specimens

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***Interpretive***

**Reference Range:**

All Ages:  $\leq 1.75$  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:**

Electrochemiluminescenceimmunoassay

**References:**

[Mayo Clinic Laboratories](#) (August 2021)

**Updates:**

8/23/2021: Moved from Esoterix to Mayo.