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**Lab Dept:** Chemistry

**Test Name:** TSH, SENSITIVE

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***General Information***

**Lab Order Codes:** TSH

**Synonyms:** Thyroid Stimulating Hormone; Ultra sensitive TSH; Thyrotropin

**CPT Codes:** 84443 – Thyroid stimulating hormone (TSH)

**Test Includes:** TSH concentration reported in uIU/mL.

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***Logistics***

**Test Indications:** TSH is synthesized and secreted by the anterior pituitary. TSH is responsible for stimulating cell reproduction and hypertrophy. Secondly, TSH stimulates the thyroid gland to synthesize and secrete T3 and T4. The measurement of circulating TSH is important in evaluating hyperthyroidism.

**Lab Testing Sections:** Chemistry

**Phone Numbers:** MIN Lab: 612-813-6280

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 1 day

**Special Instructions:** N/A

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***Specimen***

**Specimen Type:** Blood

**Container:** Preferred: Green top (Li Hep) tube  
Alternate: Red, marble or gold top tube

**Draw Volume:** 1.5 mL (Minimum: 0.6 mL) blood

**Processed Volume:** 0.5 mL (Minimum: 0.2 mL) plasma/serum

**Collection:** Routine venipuncture

**Special Processing:** Lab Staff: Centrifuge specimen, remove plasma/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

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***Interpretive***

**Reference Range:**

<b>Age:</b>	<b>Range:</b>
≤7 days:	3.2 - 21.0 uIU/mL
≥8 days:	0.5 – 4.8 uIU/mL

**Critical Values:** N/A

**Limitations:** Heterophile antibodies may interfere with immunoassay testing.

**Methodology:** Homogeneous Sandwich Chemiluminescent Immunoassay

**References:** Siemens Dimension Vista TSH Instructions For Use (7/16/13) Siemens Healthcare Diagnostics

National Committee for Clinical Laboratory Standards (NCCLS) (2002) Clinical Laboratory Technical Procedure Manuals; Approved Guideline-Fourth Edition GP2-A4

Burtis CA, Ashwood ER, editors (2006) Tietz Textbook of Clinical Chemistry and Molecular Diagnostics. 4th ed. St Louis, MO: Elsevier Saunders

Biorad Immunoassay Plus Control Product Insert

**Updates:** 8/29/2005: Method previously listed as Two Site Sandwich Immunoassay Direct Chemiluminescence standardized to WHO 3<sup>rd</sup> IRP reference material.  
10/1/2008: Name change to include Sensitive  
7/22/14: Method change, previously listed as Competitive Chemiluminescent Immunoassay  
2/9/2016: Update alt tube type