THYROID STIMULATING HORMONE, PLASMA/ SERUM

London Health Sciences Centre

Pathology and Laboratory Medicine

Orderable - TSH

Turnaround Time: 4 hours

STAT: 1 hour

Alternate Name(s):

TSH TSH-3 Thyrotropin



Laboratory: Core Lab

Requisition:

REQUISITION

Roche

Method of Analysis:

Test Schedule:

As required

GENERAL LABORATORY

Electrochemiluminescence

Specimen:

Adult:	Pediatric:
4.5 mL Green top	0-2 years: 0.5 mL Light Green top
Vacutainer tube	Microtainer
	2-10 years: 3 mL Light Green top
	Vacutainer tube
Red, Gold, or Lavender (EDTA) top tubes are also acceptable	

Collection Information:

Minimum volume of plasma or serum required is 700 μL for adult samples or 200 μL for pediatric samples.

Reference Ranges:

Age	Range
0 – 6 days:	0.70 – 15.2 mIU/L
6 days – 3 months:	0.72 – 11.0 mIU/L
3 – 12 months:	0.73 – 8.35 mIU/L
1 – 6 years:	0.70 – 5.97 mIU/L
6 – 11 years:	0.60 – 4.84 mIU/L
11 – 20 years:	0.51 – 4.30 mIU/L
> 20 years:	0.27 – 4.20 mIU/L

Interpretive Comments:

TSH should be the initial test to screen for clinically-suspected hypothyroidism or

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hyperthyroidism. If TSH is below the lower cut-off, FT4 and FT3 testing will be performed reflexively by the laboratory. If TSH is between the lower and upper cutoffs, no FT4 or FT3 testing will be performed reflexively. If TSH is above the upper cutoff, FT4 testing will be performed reflexively by the laboratory. These cut-offs are the TSH reference intervals in children and the optimal cut-offs to predict abnormal FT4 levels in adults.

The TSH cut-offs are: 2 - <6 years: <0.70 or >5.97 mIU/L 6 - <11 years: <0.60 or >4.84 mIU/L 11 - <18 years: <0.51 or >4.30 mIU/L ≥18 years: <0.58 or >6.30 mIU/L

Repeat testing of TSH should be limited to a period greater than 6 weeks, except in pregnant patients.