

TSH

Synonyms

Clinical Indication

Part of Profile / See Also

Request Form

Availability / Frequency of Analysis

Turnaround Time

Patient Preparation

Sample Requirements

Specimen Type

Volume

Acceptable Containers


 Accredited to
ISO 15189:2022

Thyroid stimulating hormone

TSH secretion is regulated by negative feedback from serum free thyroid hormone levels. The serum TSH response to change in free T4 is logarithmic; a twofold change in free T4 induces inverse 10-100 fold changes in TSH. Thus, this negative amplified feedback as the serum T4 increases or decreases, makes TSH a sensitive marker of thyroid function which can become abnormal before there is a diagnostic change in free T4.

Thyroid Function Tests. TSH is performed as a front line test. As of 09/08/22 Free T4 will no longer be provided front line as part of the TF2 profile. Exceptions are endocrinology requests and patients <18 years of age. FT4 will be reflexed if TSH is above or below the reference range.

Combined Pathology manual Blood form or ICE request

On request.

Same day

None

Serum and plasma

1 ml



Yellow top (SST) tube



Green top (lithium-heparin) tube



paediatric orange top (lithium-heparin)



paediatric green top (lithium-heparin)

Plain serum samples may also be used.

Reference Range & Units

TSH (mU/L)		
Age	Reference Range	Source
< 20 days	No range	
20 days - 19 years	0.79 - 5.85	Caliper study
> 20 years	0.3 - 5.0	Leeds TFT study

Interferences
Interpretation & Clinical
Decision Value (if applicable)

Interpretive comment will be provided based on clinical information and the results.

References

Beckman kit insert.

Test code

TSH TF1 TF2 TF3

Lab Handling

Analysed from primary tube and stored at 4°C.
 Serum and plasma stable for 7 days at 4°C.