


Accredited to
ISO 15189:2022

Thyroid Function Tests

Synonyms

TFT's, TSH

Clinical Indication

Screening for suspected thyroid disease and monitoring treatment for hypo- and hyperthyroidism.

It is normally not necessary to repeat TFT's within 14 days.

Part of Profile / See Also

TSH is analysed as a first line test with Free T4, Free T3 and thyroid antibodies analysed as indicated.

Request Form

Combined Pathology manual Blood form or ICE request.

In order to help with provision of clinical details and selection of appropriate tests, request forms/ICE includes several options for thyroid function:

- TFT1 - Thyroid Disease? - this includes TSH and ft4 front line testing.
- TFT2- On Thyroxine – this includes TSH front line and ft4 is only performed if TSH is outside of the reference range.
- TFT3 - Anti-Thyroid Rx

Availability / Frequency of Analysis

On request.

The minimum retesting interval is 14 days.

The Duty Biochemist can reinstate these tests if clinically required.

Turnaround Time

Same day

Patient Preparation

None

Sample Requirements

Specimen Type

Serum and plasma

Volume

1 ml

Acceptable Containers



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

Please see the individual pages for the [Free T4](#) and [Free T3](#) reference ranges.

This 'TSH first' strategy can give a false indication of thyroid status in pituitary dysfunction. Therefore, requests for thyroid function where pituitary dysfunction is known or suspected, must be clearly indicated so that appropriate tests can be undertaken.

Where thyroid interference is suspected, the Duty Biochemist will arrange for the blood sample to be sent to Epsom and St Helier Hospital for analysis on Abbott analysers. Appropriate interpretative comments will be added by the Duty Biochemist when the results are returned.

Interpretation & Clinical
Decision Value (if applicable)

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

References

Beckman kit insert.

Test code

TFT1 TFT2 TFT3

Lab Handling

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