

PF-PTD-287

Thyroglobulin and Thyroglobulin antibodies

Synonyms

TGB, TG

Clinical Indication

Thyroglobulin (TG) measurement is useful for monitoring of patients who have thyroid cancer, particularly follicular or papillary carcinoma of the thyroid. Guidelines set out by the British Thyroid Association state that TG should be used for post-operative follow-up of patients, and pre-operative results have no diagnostic or prognostic value. Although TG is a specific and extremely useful marker for differentiated thyroid cancer, it has no role in the diagnosis of the condition.

TG may also be of use in the differential diagnosis of congenital hypothyroidism, and in helping to distinguish subacute thyroiditis from thyrotoxicosis caused by covert administration of thyroid hormones. In the latter event, low levels of thyroglobulin are expected due to thyroid hormone suppression of thyrotropin.

Current guidelines suggest simultaneous measurement of thyroglobulin antibodies and thyroglobulin should be carried out every 6-12 months following thyroid surgery. Thyroglobulin antibodies, if present, will interfere in assays to measure thyroglobulin resulting in underestimation of thyroglobulin quantitation.

Part of Profile / See Also

Request Form

Availability / Frequency of

Analysis

Turnaround Time

Patient Preparation

Sample Requirements

Specimen Type

Volume Container Combined Pathology manual Blood form or ICE request

Referral test: Analysed by Biochemistry, Protein Reference Unit, Sheffield 8494, if specific criteria met.

None required

3 weeks

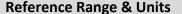
Serum (red top plain tubes are also acceptable)

0.5 ml

Yellow top (SST) tube



Paediatric SST (Yellow top – BD Microtainer)



Thyroglobulin: 1.4 - 78.0 ug/L

Thyroglobulin antibodies: <115 IU/mL

Interferences

Samples should not be collected sooner than 6 weeks post-thyroidectomy.

Interpretation & Clinical

The reappearance of circulating TG after total thyroid ablation is a sign that

Version 1.3 / April 2025 **Approved by: Consultant Biochemist**



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Decision Value (if applicable)

there is thyroid tissue remaining and may indicate that a tumour is still present.

References

https://onlinelibrary.wiley.com/doi/pdf/10.1111/cen.12515

http://www.acb.org.uk/docs/default-source/guidelines/TFTguidelinefinal.pdf

https://www.immqas.org.uk/TestItem.asp?id=817

https://www.immgas.org.uk/TestItem.asp?id=818

Test code

BTGL or TGLB (both translate to the Sheffield thyroglobulin test code)

Lab Handling

Aliquot and store in the referrals rack at 4°C (ensure at least 500ul for each referral laboratory). Sent daily by Royal Mail to PRU, Sheffield.



8494

Accredited to ISO 15189:2022