



Thyroglobulin and Thyroglobulin antibodies

Synonyms	TGB, TG
Clinical Indication	<p>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.</p> <p>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.</p> <p>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.</p>
Part of Profile / See Also	
Request Form	Combined Pathology manual Blood form or ICE request
Availability / Frequency of Analysis	Referral test: Analysed by Biochemistry, Protein Reference Unit, Sheffield 8494 , if specific criteria met.
Turnaround Time	3 weeks
Patient Preparation	None required
Sample Requirements	
Specimen Type	Serum (red top plain tubes are also acceptable)
Volume	0.5 ml
Container	 Yellow top (SST) tube  Paediatric SST (Yellow top – BD Microtainer)
Reference Range & Units	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

Decision Value (if applicable)

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



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ISO 15189:2012