

# Thyroid Antibodies



Healthscope  
PATHOLOGY

COLLECTION  
CENTRE

Healthscope Functional Pathology can also test the thyroid antibodies thyroglobulin and thyroid peroxidase. This can be added as an optional extra to the Thyroid Hormone Profile to provide a comprehensive assessment of thyroid function.

Patients with Hashimoto's thyroiditis or Graves' disease, frequently develop antibodies against thyroglobulin. Thyroglobulin-specific antibodies help in the diagnosis of these diseases, but they may also be present in apparently healthy euthyroid individuals.

It is a frequent epitope of autoantibodies in autoimmune thyroid disease so the antibody titre can be used to assess disease activity in patients who have developed such antibodies. An epitope is the part of antigen that reacts with an antibody of a T cell receptor.

## Thyroglobulin Antibodies

The presence of auto-antibodies against thyroglobulin, indicates possible inflammation of the thyroid gland (Hashimoto's thyroiditis). High levels are found in Hashimoto's thyroiditis (85%), thyroid carcinoma (45%) and Grave's disease (30%).

Low levels of antibodies are found in 10% of normal patients, many autoimmune conditions, including pernicious anaemia and SLE, and some chromosomal disorders, such as Turner's syndrome and Down's syndrome.

## Thyroid Peroxidase Antibodies/TPO Ab

The presence of thyroid peroxidase antibodies is also indicative for autoimmune thyroid disorders. The enzyme thyroid peroxidase (TPO) appears to be the particular component of the microsomes that is directly targeted by the auto-antibodies which produce this illness.

They may be positive in Hashimoto's thyroiditis, idiopathic myxoedema and Grave's disease. Non-immune thyroid disorders show no greater incidence than normal.

## Specimen Requirements

- A blood specimen is required, which can be taken at any time of the day. Fasting is not required.

## Specimen Collection

Once the practitioner has given the patient their request form, the patient takes it to their nearest Healthscope Pathology Collection Centre. Please call 1300 55 44 80 or visit [www.functionalpathology.com.au](http://www.functionalpathology.com.au) for a full list of Healthscope Pathology Collection Centres.

## Turnaround Time

The standard turn around time for this test is 10 – 14 working days from the date the patient's specimen/s are received at our laboratory.

## Test Results

Patient results will be delivered via mail, unless requested otherwise. However, we can also issue results via:

- Fax
- Electronic Download
- Web Based Results

## Technical Support

All Healthscope Functional Pathology tests are accompanied by an Interpretive Guide to assist practitioners in their clinical understanding and patient management for each result. Healthscope Functional Pathology also has experienced full time Technical Advisors available for practitioners to discuss appropriate test selection, interpretation of test results, individual cases and other technical matters. Please call 1300 55 44 80 between the hours of 8.30am and 5.30pm AEST or email [infofp@healthscope.com.au](mailto:infofp@healthscope.com.au)

## References

Upfal J and O'Callaghan J. Your Medical tests. What do they really mean? Black Inc., Schwartz Publishing Pty Ltd, Australia, 2001:140-141