

Coeliac Disease Antibodies

IgA anti-tissue transglutininase, IgG anti-tissue transglutininase & IgA Endomysial antibodies

General information

Indications for the test:

Act as a screening test for coeliac disease in patients with suspected gluten sensitivity.

With reference to Coeliac Disease NICE guidance NG20 IgA tTG is the first line of investigation for adults and children.

If the IgA tTG is negative in a patient on a gluten-containing diet e.g. gluten in more than 1 meal per day for at least 6 weeks prior to testing with normal/low IgA, then coeliac disease is unlikely. An IgA endomysial antibody test is done to confirm all new positives and equivocal results. Coeliac disease is associated with IgA deficiency (IgA deficiency is defined as total IgA less than < 0.04 g/L) and the IgA tTG will be falsely negative in these patients, therefore IgA levels should be checked.

This test is specific for coeliac disease, but a jejunal biopsy is recommended for confirmation. Refer to ESPGHAN guidelines for biopsy recommendations in children:

[https://www.espghan.org/knowledge-center/publications/Clinical-Advice-Guides/2020 New Guidelines for the Diagnosis of Paediatric Coeliac Disease](https://www.espghan.org/knowledge-center/publications/Clinical-Advice-Guides/2020-New-Guidelines-for-the-Diagnosis-of-Paediatric-Coeliac-Disease)

Sending the right sample for coeliac disease screening: <https://mft.nhs.uk/the-trust/other-departments/laboratory-medicine/information-for-gps/laboratory-medicines-newsletter-for-gps/sending-the-right-sample-for-coeliac-disease-screening/>

Laboratory Information

Analyte: IgA anti-tissue transglutininase, IgG anti-tissue transglutininase & IgA endomysial antibodies

Volume and sample type: 4ml serum

Turnaround time (calendar days from sample receipt to authorised result):

IgA anti-tissue transglutaminase Median 1

IgG anti-tissue transglutaminase Median 2

IgA endomysial antibody Median: 7

Division of Laboratory Medicine

Immunology

Frequency of Analysis: Only to monitor compliance with gluten free diet

Specimen transport: At room temperature

Additional/Special requirements: Haemolysed samples cannot be tested

Factors affecting the test:

- Becomes negative on gluten free diet.
- False Negative in IgA deficiency - our test platform will detect a low IgA level

Method: Multiplex flow immunoassay for TTG & immunofluorescence for endomysial antibodies.

Participation in EQA Scheme: UK NEQAS scheme for coeliac disease antibodies

Clinical Information

Reference range for IgA tTG & IgG tTG: 0-14.9 kU/L

Reference range for IgA Endomysial antibodies: Normal result negative

(Last updated January 2025)