

Datasheet for ABIN2648841 Anti-TPO IgG ELISA Kit



[Go to Product page](#)

Overview

Quantity: 96 tests

Target: Anti-TPO IgG (TPO IgG)

Reactivity: Human

Application: ELISA

Product Details

Sample Type: Serum

Detection Method: Colorimetric

Specificity: High Sensitive ELISA

Sensitivity: 1 U/mL

Characteristics: It is a routine practice of measuring serum autoantibodies to thyroglobulin (Tg) and microsomal (TPO) for aid in detecting and monitoring autoimmune thyroid disease. Serum anti-TPO autoantibody and anti-Tg autoantibody are found to be well correlating with histological changes in Harshimoto's thyroiditis. Clinically, positive anti-TPO autoantibody is detected in patients with chronic thyroiditis (70-90 %), primary hypothyroidism (~60 %), thyrotoxicosis (~50 %) and thyroid tumors (~17 %), however, anti-Tg autoantibody is mainly identified in patients with Harshimoto's thyroiditis and Graves' disease (40-70 %).

Target Details

Target: Anti-TPO IgG (TPO IgG)

Alternative Name: Anti-TPO IgG

Target Details

Target Type: Antibody

Application Details

Application Notes: Optimal working dilution should be determined by the investigator.

Sample Volume: 10 μ L

Assay Time: 2 h

Protocol: Assay calibrators, controls and pre-diluted human serum samples containing anti-TPO IgG are added to microtiter wells of microplate that was coated with high affinity streptavidin on its wall. The autoantibody reaction would not start until the addition of a biotinylated human TPO antigen. After the first incubation period, the unbound protein matrix was removed in the subsequent washing step. A horseradish peroxidase-conjugated rabbit anti-human IgG subclass specific antibody (tracer antibody) is added to each well. After an incubation period an immunocomplex of "solid-phase bound biotin-TPO - human anti-TPO IgG - HRP-conjugated tracer antibody" is formed if there is human anti-TPO IgG autoantibody present in the test sample. The unbound tracer antibody is removed in the subsequent washing step. HRP-conjugated tracer antibody bound to the well is then incubated with a substrate solution in a timed reaction and then measured in a spectrophotometric microplate reader. The enzymatic activity of the tracer antibody bound to the human IgG on the wall of the microtiter well is directly proportional to the amount of human anti-TPO IgG autoantibody level in the sample. Plotting the absorbance versus the respective human anti-TPO IgG autoantibody concentration for each calibrator on point-to-point or 4-parameter fit generates a calibrator curve. The concentration of human anti-TPO IgG autoantibody in test samples is determined directly from this calibrator curve.

Restrictions: For Research Use only

Handling

Storage: 4 °C