

Human Thyroid Peroxidase ELISA Kit | TPO elisa kit

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CATALOG #
AAA88014

REACTIVITY
Human

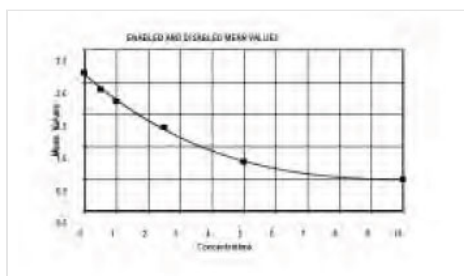
PRODUCT SYNONYMS

Thyroid Peroxidase; Human Thyroid Peroxidase ELISA Kit; TPO elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Samples	Serum, plasma, Cell Culture Supernatants, body fluid and tissue homogenate
Assay Type	Competitive
Detection Range	100-2500pg/mL
Sensitivity	1.0pg/mL
Preparation and Storage	Store all reagents at 2-8 degree C.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for TPO elisa kit

For samples: cell culture fluid, body fluid, tissue homogenate, serum and blood plasma

INTENDED USE This TPO ELISA kit is intended for laboratory research use only. The stop solution changes the color from blue to yellow and the intensity of the color is measured at 450 nm using a spectrophotometer. In order to measure the concentration of TPO in the sample, this TPO ELISA Kit includes a set of calibration standards. The calibration standards are assayed at the same time as the samples and allow the operator to produce a standard curve of Optical Density versus TPO concentration. The concentration of in the samples is then determined by comparing the O.D. of the samples to the standard curve.

PRINCIPLE OF THE ASSAY The coated well immunoenzymatic assay for the quantitative measurement of TPO utilizes a multiclonal anti-TPO antibody and an TPO-HRP conjugate. The assay sample and buffer are incubated together with TPO-HRP conjugate in pre-coated plate for one hour. After the incubation period, the wells are decanted and washed five times. The wells are then incubated with a substrate for HRP enzyme. The product of the enzyme-substrate reaction forms a blue colored complex. Finally, a stop solution is added to stop the reaction, which will then turn the solution yellow. The intensity of color is measured spectrophotometrically at 450nm in a microplate reader. The intensity of the color is inversely proportional to the TPO concentration since TPO from samples and TPO-HRP conjugate compete for the anti-TPO antibody binding site. Since the number of sites is limited, as more sites are occupied by TPO from the sample, fewer sites are left to bind TPO-HRP conjugate. Standards of known TPO concentrations are run concurrently with the samples being assayed and a standard curve is plotted relating the intensity of the color (Optical Density) to the concentration of TPO. The TPO concentration in each sample is interpolated from this standard curve.

NCBI AND UNIPROT INFORMATION

NCBI GI #	5705932
Molecular Weight	12,555 Da
NCBI Official Full Name	thyroid peroxidase, partial
UniProt Protein Name	Thyroid peroxidase
UniProt Gene Name	TPO
UniProt Entry Name	Q16496_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/tpo-human-elisa-kits/thyroid-peroxidase/88014>