

Rat Thyroid-Peroxidase IgG antibody (TPO-Ab-IgG) ELISA Kit



Catalog No: #EK11873

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Package Size: #EK11873-1 48T #EK11873-2 96T

Description

Product Name	Rat Thyroid-Peroxidase IgG antibody (TPO-Ab-IgG) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat (<i>Rattus norvegicus</i>)
Storage	<p>The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition.</p> <p>The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).</p>

Application Details

Detect Range:0.312-20 ng/mL

Sensitivity:0.128 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

Product Description

Detection Method:Competitive ELISA
Test principle:This assay employs the competitive enzyme immunoassay technique. The microtiter plate provided in this kit has been pre-coated with an antibody specific to TPO-Ab-IgG. Standards or samples are then added to the appropriate microtiter plate wells with a Horseradish Peroxidase (HRP)-conjugated TPO-Ab-IgG and incubated. The competitive inhibition reaction is launched between with HRP labeled TPO-Ab-IgG and unlabeled TPO-Ab-IgG with the antibody. A substrate solution is added to the wells and the color develops in opposite to the amount of TPO-Ab-IgG in the sample. The color development is stopped and the intensity of the color is measured.
Product Overview:Thyroid peroxidase is an enzyme normally found in the thyroid gland, which plays an important role in the production of thyroid hormones. Fabrication of thyroid hormones is conducted by the enzyme thyroid peroxidase, an integral membrane protein present in the apical (colloid-facing) plasma membrane of thyroid epithelial cells.Thyroid peroxidase catalyzes two sequential reactions: Iodination of tyrosines on thyroglobulin Synthesis of thyroxine or triiodothyronine from two iodotyrosines. Through the action of thyroid peroxidase, thyroid hormones accumulate in colloid, on the surface of thyroid epithelial cells. Remember that hormone is still tied up in molecules of thyroglobulin - the task remaining is to liberate it from the scaffold and secrete free hormone into blood.

Note: This product is for in vitro research use only