

Product: Thyroid Peroxidase (TPO), human, recombinant
Catalog #: 05-52084R
Amount: 10 µg

DESCRIPTION:

Recombinant human Thyroid Peroxidase (rHuTPO) Thyroid Peroxidase (TPO) represents one of the main autoantigenic targets in autoimmune thyroid disease of humans. Its identity with the formerly so-called 'microsomal' antigen has been shown several years ago. As an integral membrane glycoprotein it is restricted to the apical plasma membrane of the follicular epithelial cells and comprises two identical subunits of approx. 100 kDa molecular weight. The hemoprotein TPO plays a key role in the thyroid hormone biosynthesis by catalysing both the iodination of tyrosyl residues and the coupling of iodotyrosyl residues in thyroglobulin (TG) to form precursors of the thyroid hormones T4 and T3.

Recombinant Human TP produced in SF9 is a glycosylated, polypeptide chain containing 834 amino acids and having a molecular mass of 92,872 dalton

rHuTPO is expressed with a -6xHis tag and purified by proprietary chromatographic techniques.

SOURCE:

Sf9 insect cells

PURITY:

> 95% (SDS- PAGE)

IMMUNOLOGICAL FUNCTION:

1. Binds IgG-type human auto-antibodies.
2. Auto-antibodies to TPO recognize conformation-dependent epitopes
3. Standard ELISA test (checker-board analysis of positive/negative sera panels, including international reference serum NIBSC 66/387)

APPLICATION:

Western-Blot with monoclonal anti-TPO antibody and monoclonal anti-hexa-His-tag antibody.

ELISA

Suitable for biotinylation and iodination.

COATING CONCENTRATION:

0.15-0.375 µg/ml (depending on the type of ELISA plate and coating buffer).

FORM:

Purified, in 16mM sodium phosphate buffer pH-7.6, 400mM sodium chloride, 0.08mM KI and 20% glycerol.

STORAGE:

-20°C (aliquot), avoid freezing and thawing cycles

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