



Product Datasheet

Product Name	Thyroid Peroxidase Human Recombinant
Cata No	CB500464
Source	<i>Sf9 insect cells.</i>
Synonyms	Thyroid peroxidase, EC 1.11.1.8, TPO, MSA, TPX.

Description

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.

Thyroid Peroxidase Human Recombinant produced

in SF9 is a glycosylated, polypeptide chain containing 834 amino acids and having a molecular mass of 92,872 Dalton (excluding glycosylation), 101 kDa total mass.

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

Purity

Greater than 95% as determined by SDS-PAGE.

Formulation

TPO is supplied in 16mM HEPES pH-7.6, 160mM NaCl, 0.08mM KI and 20% glycerol.

Applications

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