TPO
Recombinant Human Thyroid Peroxidase

Catalog No.	CSI19712A CSI19712B CSI19712C	**Quantity:**	5 µg 20 µg 1.0 mg

Alternate Names: TPO, EC:1.11.1.8

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.

UniProt ID: P07202

Gene ID: 7173

Source: Sf9 insect cells

Molecular Weight: 92.87 kDa (834 aa) predicted, 101 kDa apparent on SDS-PAGE with 6x His tag

Formulation: 16mM HEPES, 160mM NaCl, 0.08 mM KI, pH 7.6 containing 20% glycerol.

Purity: >95% by SDS-PAGE analysis

Concentration: 0.5 mg/ml, lot specific

Applications: **ELISA:** coating concentration range 0.15-0.375 µg/ml
Western blot

Application Notes: **Binds IgG-type human auto-antibodies.**
Auto-antibodies to TPO recognize conformation-dependent epitopes.
Available biotinylated as CSI19772

Storage & Stability: Store at 2-8°C for use within 2 weeks. Store aliquots at -20°C to -80°C for longer term.
Avoid repeated freeze-thaw cycles.

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