



Human Thyroid Peroxidase [His] (DAG597)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Species	Human
Purity	>95% as determined by SDS-PAGE
Conjugate	His
Applications	WB, ELISA
Molecular Weight	93 kDa
Format	Liquid
Concentration	Batch dependent - please inquire should you have specific requirements
Size	50 µg
Buffer	Ionic strength around 150 mM, neutral to slightly alkaline pH and 20 % glycerol as cryoprotective agent.
Preservative	None
Storage	2-8°C short term, -20°C long term

BACKGROUND

Introduction	Thyroid peroxidase or thyroperoxidase (TPO) is an enzyme expressed mainly in the thyroid that liberates iodine for addition onto tyrosine residues on thyroglobulin for the production of thyroxine (T4) or triiodothyronine (T3), thyroid hormones. In humans, thyroperoxidase is encoded by the TPO gene. Inorganic iodine enters the body primarily as iodide, I-. After entering the thyroid follicle (thyroid follicular cell) via a Na ⁺ /I ⁻ symporter (NIS) on the basolateral side, iodide is shuttled across the apical membrane into the colloid via pendrin, after which thyroid
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peroxidase oxidizes iodide to atomic iodine (I) or iodinium (I+).

Keywords

TPO; thyroid peroxidase; MSA; TPX; TDH2A; thyroperoxidase; thyroid microsomal antigen
