

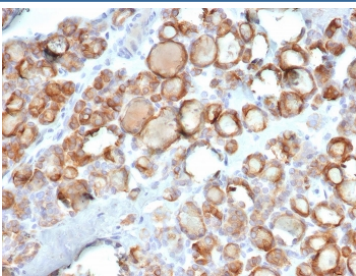
Thyroid Peroxidase Antibody / TPO [clone TPO/7088R] (V4901)

Catalog No.	Formulation	Size
V4901-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4901-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4901SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

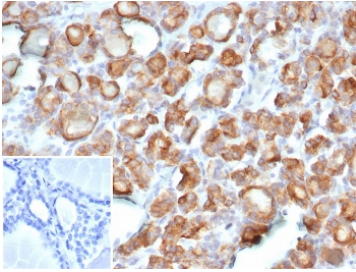
Recombinant **RABBIT MONOCLONAL**

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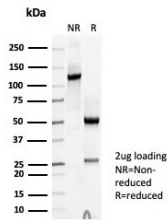
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	TPO/7088R
Purity	Protein A/G affinity
UniProt	P07202
Localization	Cytoplasm, Cell surface
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Thyroid Peroxidase antibody is available for research use only.



IHC staining of FFPE human thyroid carcinoma tissue with Thyroid Peroxidase antibody (clone TPO/7088R). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human thyroid carcinoma tissue with Thyroid Peroxidase antibody (clone TPO/7088R). Inset: PBS used in place of primary Ab (secondary Ab negative control). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free Thyroid Peroxidase antibody (clone TPO/7088R) as confirmation of integrity and purity.

Description

Thyroperoxidase (TPO) is a 933 amino acid, type I transmembrane glycoprotein that plays a key role in thyroid gland function and autoimmunity. It is present as a dimer on the apical surface of thyroid follicular cells. TPO functions in the iodination of tyrosine residues in thyroglobulin and phenoxy-ester formation between pairs of iodinated tyrosines to generate the thyroid hormones, thyroxine and triiodothyronine. Mutations in this gene are associated with several disorders of thyroid hormonogenesis, including congenital hypothyroidism, congenital goiter, and thyroid hormone organification defect IIA. Malignant thyroid tumors exhibit an anomaly in TPO resulting in lower affinity for anti-TPO. This antibody may aid in the differentiation between benign and malignant thyroid tumors.

Application Notes

Optimal dilution of the Thyroid Peroxidase antibody should be determined by the researcher.

Immunogen

A recombinant fragment of human TPO (within amino acids 600-900) was used as the immunogen for the Thyroid Peroxidase antibody.

Storage

Aliquot the Thyroid Peroxidase antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles.