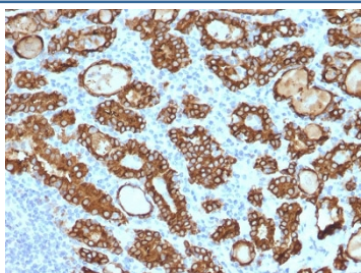


Thyroid Peroxidase Antibody [clone TPO/1922] (V3932)

Catalog No.	Formulation	Size
V3932-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3932-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3932SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	TPO/1922
Purity	Protein G affinity chromatography
UniProt	P07202
Localization	Cytoplasmic, cell surface
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Thyroid Peroxidase antibody is available for research use only.



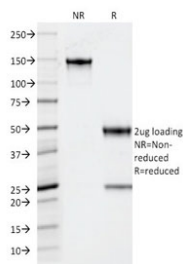
IHC testing of FFPE human thyroid carcinoma stained with Thyroid Peroxidase antibody (clone TPO/1922). Required HIER: boil tissue sections in 10mM citrate buffer, pH 6, for 10-20 min followed by cooling at RT for 20 min.

Human Protein Microarray Specificity Validation



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using Thyroid Peroxidase antibody (clone TPO/1922). These results demonstrate the foremost specificity of the TPO/1922 mAb.

Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free Thyroid Peroxidase antibody (clone TPO/1922) 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 portion of amino acids 685-804 from the human protein was used as the immunogen for the Thyroid Peroxidase antibody.

Storage

Store the Thyroid Peroxidase antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).