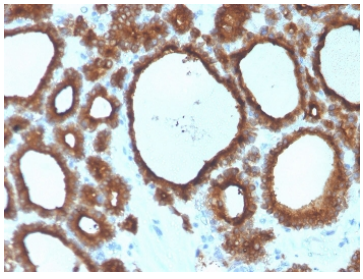
Thyroid Peroxidase Antibody / TPO [clone TPO/3700] (V8557)

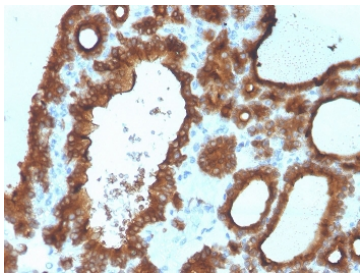
Catalog No.	Formulation	Size
V8557-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8557-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8557SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

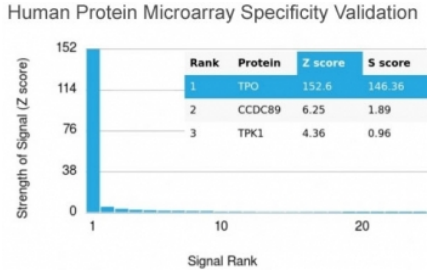
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	TPO/3700
Purity	Protein G affinity chromatography
UniProt	P07202
Localization	Cytoplasmic, cell surface
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
Limitations	This Thyroid Peroxidase antibody is available for research use only.



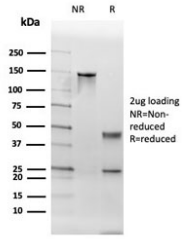
IHC staining of FFPE human thyroid carcinoma with Thyroid Peroxidase antibody. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



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Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using Thyroid Peroxidase antibody. These results demonstrate the foremost specificity of the TPO/3700 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 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).

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