TPO (Thyroid Peroxidase) (Thyroid Marker) Antibody

Mouse Monoclonal Antibody [Clone TPO/3700]

Catalog No	Format	Size
7173-MSM10-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
7173-MSM10-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
7173-MSM10-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

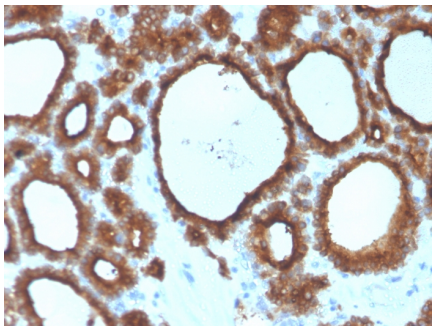
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

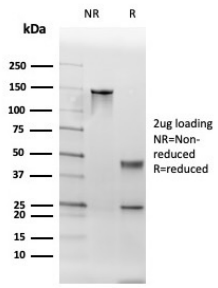
Clone	TPO/3700
Gene Name	TPO
Immunogen	Recombinant fragment of human TPO (around aa 685-804) (Exact sequence is proprietary)
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1 / Kappa
Mol. Weight of Antigen	100kDa
Cellular Localization	Cell surface, Membrane
Species Reactivity	Human
Positive Control	Thyroid Carcinoma

**Optimal dilution for a specific application should be determined.*

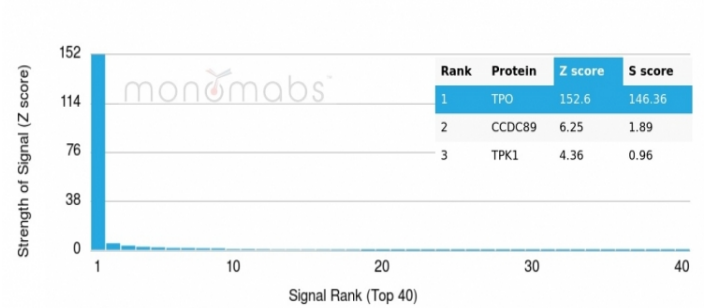
Product Images for TPO (Thyroid Peroxidase) (Thyroid Marker) Antibody



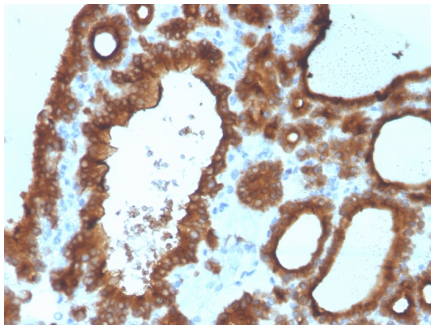
Formalin-fixed, paraffin-embedded human Thyroid Carcinoma stained with Thyroid Peroxidase Mouse Monoclonal Antibody (TPO/3700).



SDS-PAGE Analysis Thyroid Peroxidase Mouse Monoclonal Antibody (TPO/3700).Confirmation of Purity and Integrity of Antibody.



Analysis of Protein Array containing more than 19,000 full-length human proteinsusing Thyroid Peroxidase Mouse Monoclonal Antibody (TPO/3700). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



Formalin-fixed, paraffin-embedded human Thyroid Carcinoma stained with Thyroid Peroxidase Mouse Monoclonal Antibody (TPO/3700).

Specificity & Comments

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.

Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

Cardiovascular

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.