10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Thyroid peroxidase Rabbit pAb

Thyroid peroxidase Rabbit pAb
Catalog # AP54256

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P07202
Reactivity	Rat, Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	102963
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Thyroid peroxidase
Epitope Specificity	111-210/933
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane; Single-pass type I membrane protein. Isoform 3: Cell surface.
DISEASE	Note=An alternative splicing in the thyroperoxidase mRNA can cause Graves' disease. Defects in TPO are the cause of thyroid dyshormonogenesis 2A (TDH2A) [MIM:274500]. A disorder due to defective conversion of accumulated iodide to organically bound iodine. The iodide organification defect can be partial or complete.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a membrane-bound glycoprotein. The encoded protein acts as an enzyme and plays a central role in thyroid gland function. The protein 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. Multiple transcript variants encoding distinct isoforms have been identified for this gene, but the full-length nature of some variants has not been determined. [provided by RefSeq, May 2011].

Additional Information

Gene ID	7173
Other Names	Thyroid peroxidase, TPO, 1.11.1.8, TPO (HGNC:12015)
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name TPO (HGNC:12015)

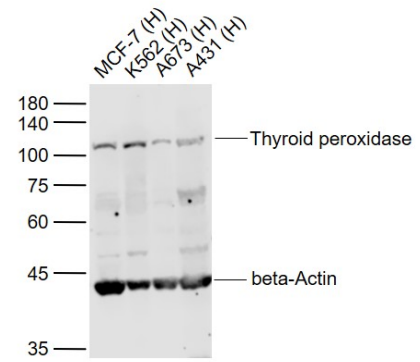
Function Iodination and coupling of the hormonogenic tyrosines in thyroglobulin to yield the thyroid hormones T(3) and T(4).

Cellular Location Membrane; Single-pass type I membrane protein.

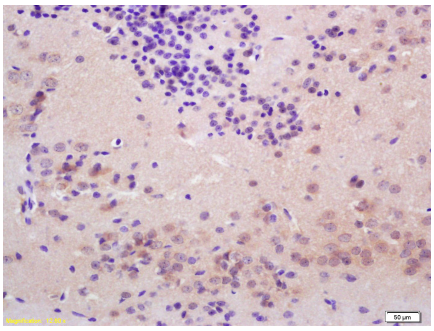
Background

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Images



Sample:
Lane 1: MCF-7 (Human) Cell Lysate at 30 ug
Lane 2: K562 (Human) Cell Lysate at 30 ug
Lane 3: A673 (Human) Cell Lysate at 30 ug
Lane 4: A431 (Human) Cell Lysate at 30 ug
Primary:
Anti- Thyroid peroxidase (AP54256) at 1/1000 dilution
Anti-beta-Actin (AP54256) at 1/2000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 101 kD
Observed band size: 105 kD



Tissue/cell: Rat brain; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-Thyroid peroxidase Polyclonal Antibody, Unconjugated(AP54256) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.