



# Thyroid Peroxidase(TPO) (ABT45R) Rabbit mAb (Ready to Use)

<b>Catalog No</b>	YP-rAb-18165
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human
<b>Applications</b>	IHC
<b>Gene Name</b>	TPO
<b>Protein Name</b>	Thyroid Peroxidase(TPO)
<b>Purification Process</b>	Protein A
<b>Specificity</b>	This antibody detects endogenous levels of Thyroid Peroxidase
<b>Formulation</b>	The prediluted ready-to-use antibody is diluted in phosphate buffer saline containing stabilizing protein and 0.05% Proclin 300
<b>Source</b>	Monoclonal, Rabbit,IgG
<b>Dilution</b>	Ready to use for IHC Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
<b>Concentration</b>	0.5 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	2° C to 8° C/1 year,Ship by ice bag
<b>Synonyms</b>	Thyroid peroxidase ; TPO ;
<b>Observed Band</b>	
<b>Calculated Molecular Weight</b>	
<b>Cell Pathway</b>	Membrane; Single-pass type I membrane protein.; [Isoform 3]: Cell surface.
<b>Tissue Specificity</b>	Glandular pool- thyroid,Spleen,Thyroid,
<b>Function</b>	Alternative products:Additional isoforms seem to exist,Catalytic activity:2 iodide + H(2)O(2) + 2 H(+) = 2 iodine + 2 H(2)O.,cofactor:Binds 1 calcium ion per heterodimer.,cofactor:Binds 1 heme B (iron-protoporphyrin IX) group covalently per heterodimer.,Disease:An alternative splicing in the thyroperoxidase mRNA can cause Graves' disease.,Disease:Defects in TPO are the cause of congenital hypothyroidism due to dyshormonogenesis type 2A (CHDH2A) [MIM:274500]; also called genetic defect in thyroid hormonogenesis 2A or thyroid hormone organification defect II. CHDH2A is due to defective conversion of accumulated iodide to organically bound iodine. The iodide organification defect can be partial or complete.,Function:Iodination and coupling of the hormonogenic tyrosines in





thyroglobulin to yield the thyroid hormones T(3) and T(4).,online information:Thyroid peroxidase entry,pathway:Hormone biosynthesis; thyroid hormone biosynthesis.,PTM:Cleaved in its N-terminal part.,PTM:Glycosylated.,PTM:Heme is covalently bound through a H(2)O(2)-dependent autocatalytic process. Heme insertion is important for the delivery of protein at the cell surface.,similarity:Belongs to the peroxidase family. XPO subfamily.,similarity:Contains 1 EGF-like domain.,similarity:Contains 1 Sushi (CCP/SCR) domain.,subunit:Interacts with DUOX1, DUOX2 and CYBA.,

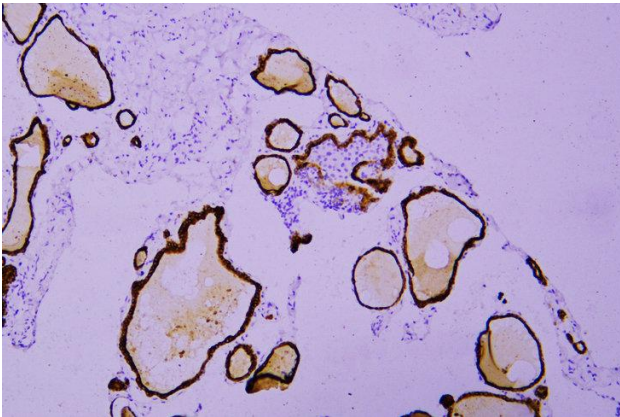
## Background

### matters needing attention

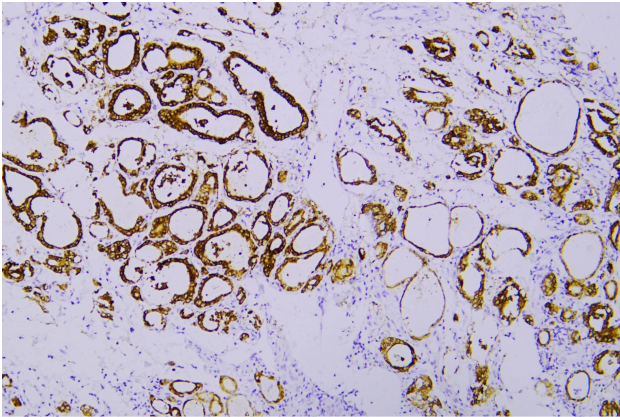
Avoid repeated freezing and thawing!

### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



Immunohistochemical analysis of paraffin-embedded human Thyroid. 1, Antibody was incubated at 4° overnight. 2, Citrate buffer of pH6.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



Human follicular thyroid carcinoma was stained with anti-Thyroid Peroxidase(TPO) (ABT45R) rabbit mAb

