

Recombinant Anti-Thyroglobulin Rabbit mAb

Catalog # AP95304

Product Information

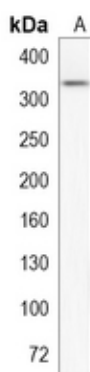
Application	WB, IHC, FC, IF/IC
Primary Accession	P01266
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Monoclonal
Calculated MW	304790

Additional Information

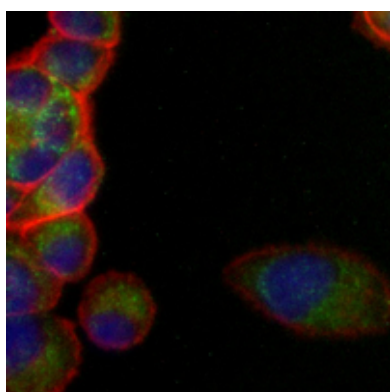
Gene ID	7038
Other Names	Thyroglobulin; Tg
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within human Thyroglobulin protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~1:10~50 IF/IC~~N/A
Format	Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	TG (HGNC:11764)
Function	Acts as a substrate for the production of iodinated thyroid hormones thyroxine (T4) and triiodothyronine (T3) (PubMed: 17532758 , PubMed: 32025030). The synthesis of T3 and T4 involves iodination of selected tyrosine residues of TG/thyroglobulin followed by their oxidative coupling in the thyroid follicle lumen (PubMed: 32025030). Following TG re-internalization and lysosomal-mediated proteolysis, T3 and T4 are released from the polypeptide backbone leading to their secretion into the bloodstream (PubMed: 32025030). One dimer produces 7 thyroid hormone molecules (PubMed: 32025030).
Cellular Location	Secreted. Note=Secreted into the thyroid follicle lumen (PubMed:19509106). Localizes to colloid globules, a structure formed in the thyroid follicle lumen consisting of cross-linked TG arranged in concentric layers (PubMed:11082042, PubMed:8626858).
Tissue Location	Specifically expressed in the thyroid gland.



Western blot analysis of Thyroglobulin expression in mouse thyroid (A) whole cell lysates. (Predicted band size: 305 kD; Observed band size: 305 kD)



Immunofluorescent analysis of Thyroglobulin staining in TT cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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