

## Product datasheet

# Anti-Thyroglobulin antibody [EPR9730] ab156008

Recombinant RabMAb

★★★★★ [1 Abreviews](#) [17 References](#) [12 Images](#)

### Overview

<b>Product name</b>	Anti-Thyroglobulin antibody [EPR9730]
<b>Description</b>	Rabbit monoclonal [EPR9730] to Thyroglobulin
<b>Host species</b>	Rabbit
<b>Specificity</b>	The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), WB, IHC-P, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide within Human Thyroglobulin aa 1000-1100. The exact sequence is proprietary. Database link: <a href="#">P01266</a>
<b>Positive control</b>	Mouse thyroid, rat thyroid, and Human thyroid lysates, Human thyroid gland follicular carcinoma tissue and Human thyroid gland papillary carcinoma tissue, TT cells
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 0.05% BSA, 59% PBS
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal

**Clone number**                      EPR9730  
**Isotype**                                IgG

## Applications

**The Abpromise guarantee**        Our **Abpromise guarantee** covers the use of ab156008 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		1/10000 - 1/50000. Detects a band of approximately 294-300 kDa (predicted molecular weight: 305 kDa).
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
ICC/IF		1/50 - 1/100.

## Target

**Function**                               Precursor of the iodinated thyroid hormones thyroxine (T4) and triiodothyronine (T3).

**Tissue specificity**                   Thyroid gland specific.

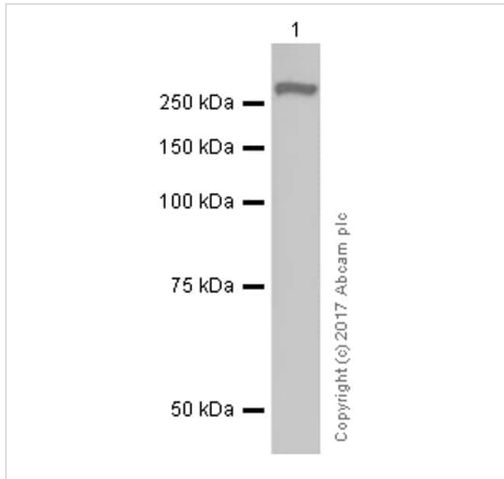
**Involvement in disease**           Defects in TG are the cause of congenital hypothyroidism due to dysmorphogenesis type 3 (CHDH3) [MIM:274700]. A disorder due to thyroid dysmorphogenesis, causing large goiters of elastic and soft consistency in the majority of patients. Although the degree of thyroid dysfunction varies considerably among patients with defective thyroglobulin synthesis, patients usually have a relatively high serum free triiodothyronine (T3) concentration with disproportionately low free tetraiodothyronine (T4) level. The maintenance of relatively high free T3 levels prevents profound tissue hypothyroidism except in brain and pituitary, which are dependent on T4 supply, resulting in neurologic and intellectual defects in some cases.  
Variations in TG are associated with susceptibility to autoimmune thyroid disease type 3 (AITD3) [MIM:608175]. AITDs including Graves disease (GD) and Hashimoto thyroiditis (HT), are among the most common human autoimmune diseases. They are complex diseases, which are caused by an interaction between susceptibility genes and nongenetic factors, such as infection.

**Sequence similarities**                Belongs to the type-B carboxylesterase/lipase family.  
Contains 11 thyroglobulin type-1 domains.

**Post-translational modifications**   Sulfated tyrosines are desulfated during iodination.

**Cellular localization**                Secreted.

## Images



Western blot - Anti-Thyroglobulin antibody [EPR9730] (ab156008)

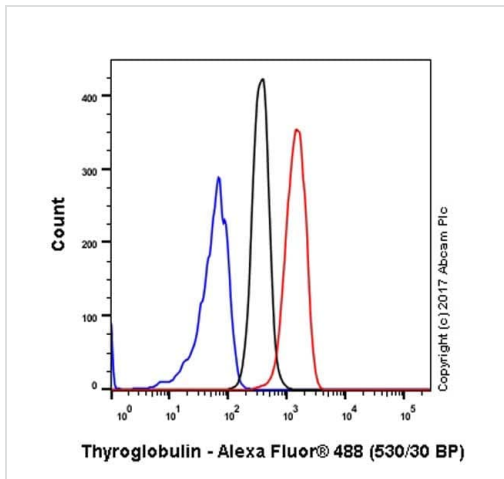
Anti-Thyroglobulin antibody [EPR9730] (ab156008) at 1/50000 dilution (purified) + Rat thyroid lysates at 20 µg

**Secondary**

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

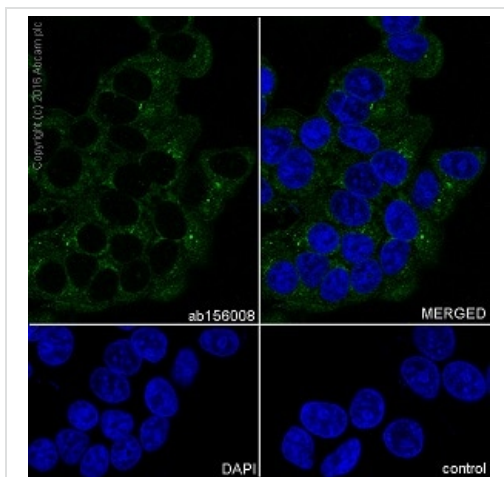
**Predicted band size:** 305 kDa

Blocking and diluting buffer: 5% NFDm/TBST



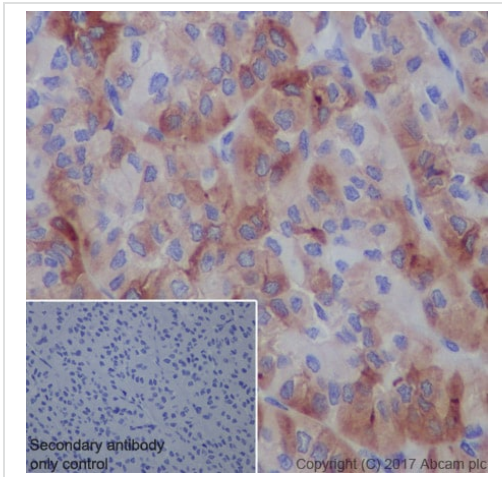
Flow Cytometry (Intracellular) - Anti-Thyroglobulin antibody [EPR9730] (ab156008)

Intracellular Flow Cytometry analysis of TT (Human thyroid carcinoma epithelial cell) cells labeling Thyroglobulin with purified ab156008 at 1/70 dilution (10µg/ml) (red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



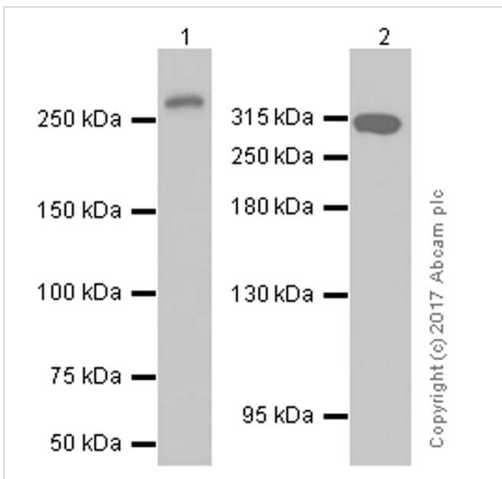
Immunocytochemistry/ Immunofluorescence - Anti-Thyroglobulin antibody [EPR9730] (ab156008)

Immunocytochemistry/ Immunofluorescence analysis of TT (Human thyroid carcinoma epithelial cell) cells labeling Thyroglobulin with Purified ab156008 at 1:100 dilution. Cells were fixed in 100% Methanol. ab150077 Goat anti rabbit IgG(Alexa Fluor® 488) was used as the secondary antibody at 1:1000 dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thyroglobulin antibody [EPR9730] (ab156008)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human thyroid carcinoma tissue sections labeling Thyroglobulin with Purified ab156008 at 1:500 dilution (1.36 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



Western blot - Anti-Thyroglobulin antibody [EPR9730] (ab156008)

**All lanes :** Anti-Thyroglobulin antibody [EPR9730] (ab156008) at 1/50000 dilution (purified)

**Lane 1 :** Mouse thyroid lysates

**Lane 2 :** ICR thyroid lysates

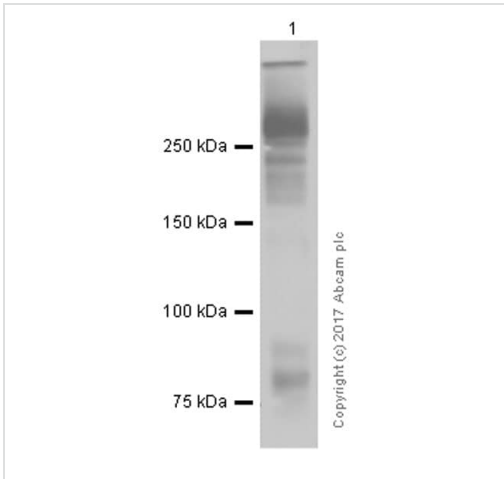
Lysates/proteins at 15 µg per lane.

**Secondary**

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**)

**Predicted band size:** 305 kDa

Blocking and diluting buffer: 5% NFDm/TBST



Western blot - Anti-Thyroglobulin antibody [EPR9730] (ab156008)

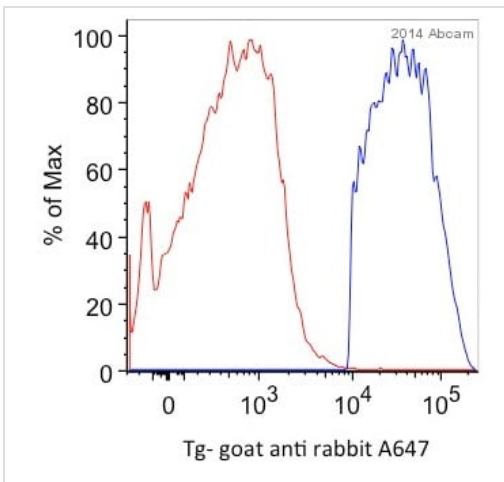
Anti-Thyroglobulin antibody [EPR9730] (ab156008) at 1/10000 dilution (purified) + Human thyroid lysates at 15 µg

**Secondary**

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

**Predicted band size:** 305 kDa

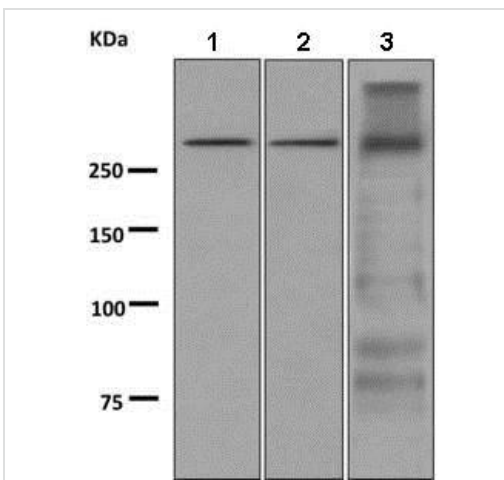
Blocking and diluting buffer: 5% NFDm/TBST.



Flow Cytometry (Intracellular) - Anti-Thyroglobulin antibody [EPR9730] (ab156008)

This image is courtesy of an Abreview submitted by Sanjay Gawade

Unpurified ab156008 staining Thyroglobulin in mouse thyroid cells by intracellular flow cytometry. Cells were fixed with formaldehyde and permeabilized with permeabilization buffer. The sample was incubated with the primary antibody (1/100 in FACS buffer) for 30 minutes at 24°C. An Alexa Fluor® 647-conjugated goat anti-rabbit IgG (1/2000) was used as the secondary antibody. Gating Strategy: Epithelial cells. Red line shows unlabeled sample, blue line shows labeled sample.



Western blot - Anti-Thyroglobulin antibody [EPR9730] (ab156008)

**All lanes :** Anti-Thyroglobulin antibody [EPR9730] (ab156008) at 1/10000 dilution (unpurified)

**Lane 1 :** Mouse thyroid lysate

**Lane 2 :** Rat thyroid lysate

**Lane 3 :** Human thyroid lysate

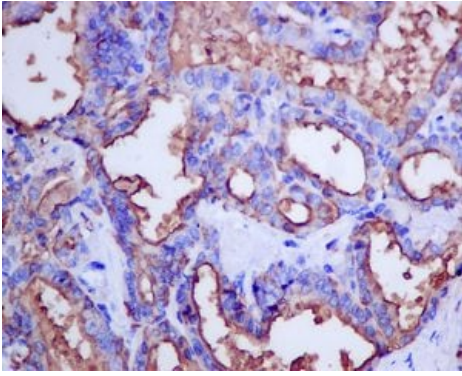
Lysates/proteins at 10 µg per lane.

**Secondary**

**All lanes :** HRP labelled goat anti-rabbit at 1/2000 dilution

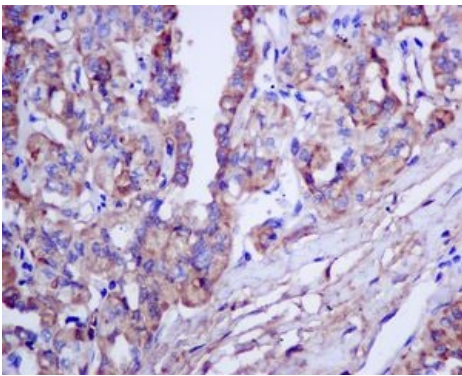
**Predicted band size:** 305 kDa

**Observed band size:** 294-300 kDa



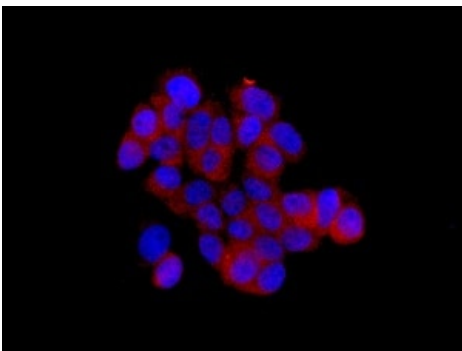
Immunohistochemical analysis of paraffin embedded Human thyroid gland follicular carcinoma tissue labeling Thyroglobulin with unpurified ab156008 antibody at 1/250.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thyroglobulin antibody [EPR9730] (ab156008)



Immunohistochemical analysis of paraffin embedded Human thyroid gland papillary carcinoma tissue labeling Thyroglobulin with unpurified ab156008 antibody at 1/250.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thyroglobulin antibody [EPR9730] (ab156008)



Immunofluorescent analysis of TT cells labeling Thyroglobulin with unpurified ab156008 at 1/50.

Immunocytochemistry/ Immunofluorescence - Anti-Thyroglobulin antibody [EPR9730] (ab156008)

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-Thyroglobulin antibody [EPR9730] (ab156008)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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