

Product datasheet

Anti-Thyroglobulin antibody [EPR9730] - BSA and Azide free ab271919

Recombinant RabMAb

8 Images

Overview

| | |
|----------------------------|--|
| Product name | Anti-Thyroglobulin antibody [EPR9730] - BSA and Azide free |
| Description | Rabbit monoclonal [EPR9730] to Thyroglobulin - BSA and Azide free |
| Host species | Rabbit |
| Tested applications | Suitable for: ICC/IF, IHC-P, WB, Flow Cyt (Intra) |
| Species reactivity | Reacts with: Human Predicted to work with: Mouse, Rat  |
| Immunogen | Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. |
| Positive control | Mouse thyroid, rat thyroid, and Human thyroid lysates, Human thyroid gland follicular carcinoma tissue and Human thyroid gland papillary carcinoma tissue, TT cells |
| General notes | <p>ab271919 is the carrier-free version of ab156008.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit</p> |

monoclonal antibodies. For details on our patents, please refer to [RabMAb® patents](#).

Properties

| | |
|-----------------------------|---|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Store at +4°C. Do Not Freeze. |
| Storage buffer | pH: 7.2 Constituent: PBS |
| Carrier free | Yes |
| Purity | Protein A purified |
| Clonality | Monoclonal |
| Clone number | EPR9730 |
| Isotype | IgG |

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab271919 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 |
|------------------|-----------|--|
| ICC/IF | | Use at an assay dependent concentration. |
| IHC-P | | Use at an assay dependent concentration. 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. |
| WB | | Use at an assay dependent concentration. Predicted molecular weight: 305 kDa. |
| Flow Cyt (Intra) | | Use at an assay dependent concentration. |

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.

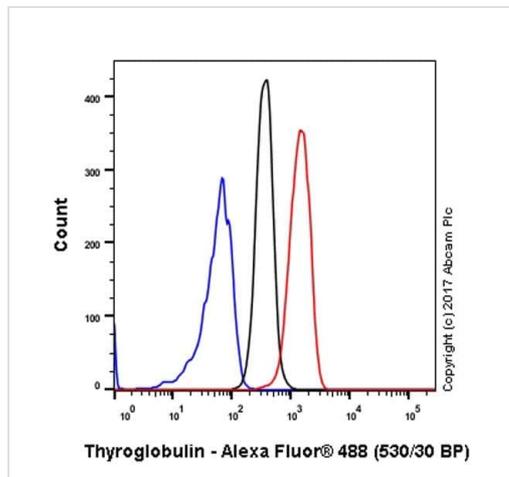
Post-translational modifications

Sulfated tyrosines are desulfated during iodination.

Cellular localization

Secreted.

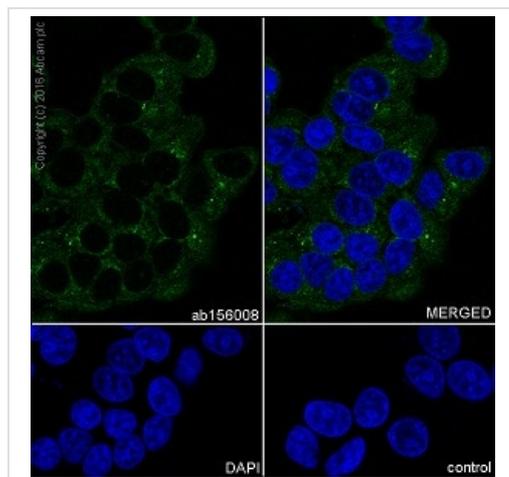
Images



Flow Cytometry (Intracellular) - Anti-Thyroglobulin antibody [EPR9730] - BSA and Azide free (ab271919)

Intracellular Flow Cytometry analysis of TT (Human thyroid carcinoma epithelial cell) cells labeling Thyroglobulin with purified [ab156008](#) at 1/70 dilution (10 µg/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).

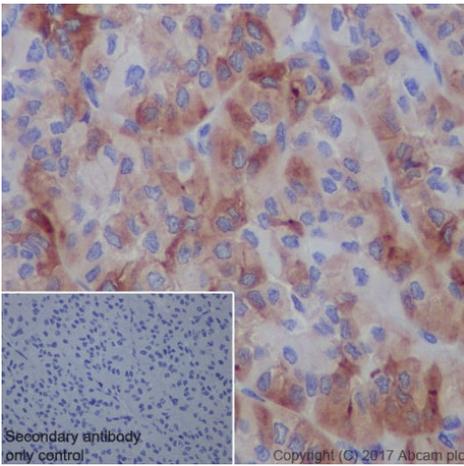
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab156008](#)).



Immunocytochemistry/ Immunofluorescence - Anti-Thyroglobulin antibody [EPR9730] - BSA and Azide free (ab271919)

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.

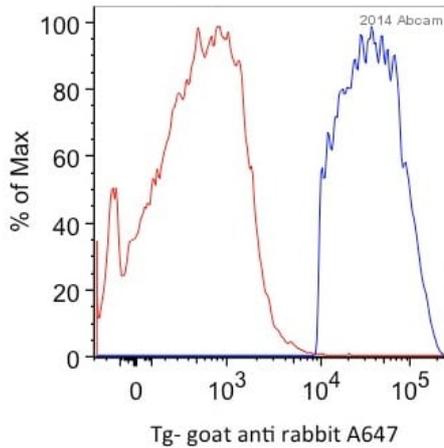
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab156008](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thyroglobulin antibody [EPR9730] - BSA and Azide free (ab271919)

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab156008](#)).

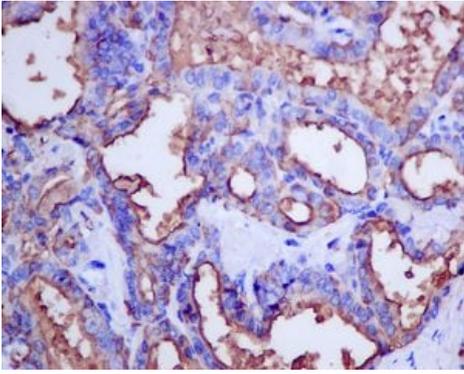


Flow Cytometry (Intracellular) - Anti-Thyroglobulin antibody [EPR9730] - BSA and Azide free (ab271919)

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.

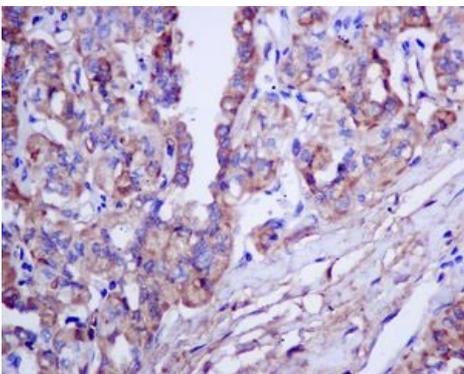
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab156008](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thyroglobulin antibody [EPR9730] - BSA and Azide free (ab271919)

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

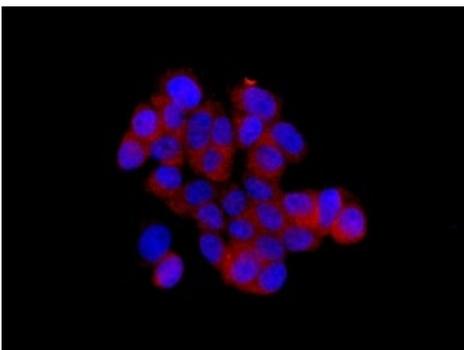
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab156008](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thyroglobulin antibody [EPR9730] - BSA and Azide free (ab271919)

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab156008](#)).



Immunocytochemistry/ Immunofluorescence - Anti-Thyroglobulin antibody [EPR9730] - BSA and Azide free (ab271919)

Immunofluorescent analysis of TT cells labeling Thyroglobulin with unpurified [ab156008](#) at 1/50.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([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] - BSA and Azide free (ab271919)

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