




Product datasheet

Alexa Fluor® 488 Anti-Thyroglobulin antibody [EPR9730] ab214872

Recombinant RabMAb

2 Images

Overview

Product name	Alexa Fluor® 488 Anti-Thyroglobulin antibody [EPR9730]
Description	Alexa Fluor® 488 Rabbit monoclonal [EPR9730] to Thyroglobulin
Host species	Rabbit
Conjugation	Alexa Fluor® 488. Ex: 495nm, Em: 519nm
Tested applications	Suitable for: ICC/IF
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat 
Immunogen	Synthetic peptide within Human Thyroglobulin aa 1000-1100. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please contact our Scientific Support team to discuss your requirements. Database link: P01266  Run BLAST with  Run BLAST with
Positive control	ICC/IF: TT cells
General notes	<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 monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.</p> <p>Alexa Fluor® is a registered trademark of Molecular Probes, Inc, a Thermo Fisher Scientific Company. The Alexa Fluor® dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor® dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). As this product contains the Alexa Fluor® dye the sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which</p>

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Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. Store In the Dark.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR9730
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab214872 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		1/50. This product gave a positive signal in TT cells fixed with 100% methanol (5 min)

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.

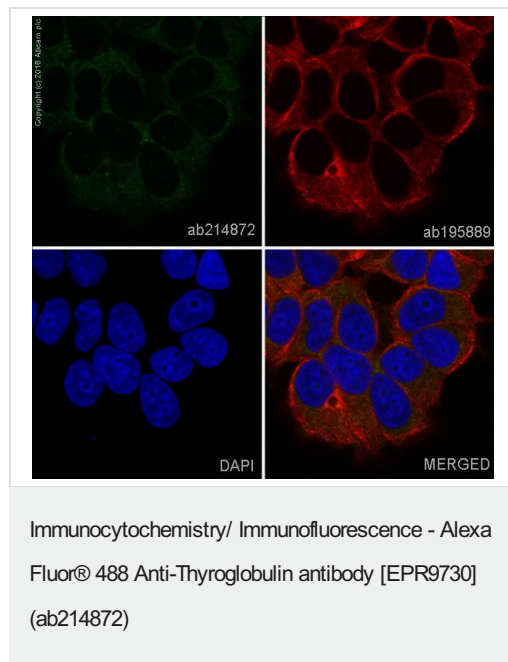
Post-translational modifications

Sulfated tyrosines are desulfated during iodination.

Cellular localization

Secreted.

Images



ab214872 staining Thyroglobulin in TT cells. The cells were fixed with 100% methanol (5 min), and then incubated in 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h to permeabilize the cells and block non-specific protein-protein interactions.

The cells were then incubated overnight at +4°C with ab214872 at 1/50 dilution (shown in green) and **ab195889**, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 594), at 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

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

Alexa Fluor® 488 Anti-Thyroglobulin antibody [EPR9730] (ab214872)

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

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