

Anti-TSH Receptor/TSH-R antibody [EPR19751] - BSA and Azide free ab251559

Recombinant RabMAb

6 Images

Overview

| | |
|---------------------|---|
| Product name | Anti-TSH Receptor/TSH-R antibody [EPR19751] - BSA and Azide free |
| Description | Rabbit monoclonal [EPR19751] to TSH Receptor/TSH-R - BSA and Azide free |
| Host species | Rabbit |
| Tested applications | Suitable for: IHC-P |
| Species reactivity | Reacts with: Human |
| Immunogen | Recombinant fragment. This information is proprietary to Abcam and/or its suppliers. |
| General notes | <p>ab251559 is the carrier-free version of ab218108.</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 monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> |

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 | EPR19751 |
| Isotype | IgG |

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab251559 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 |
|-------------|-----------|---|
| 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. |

Target

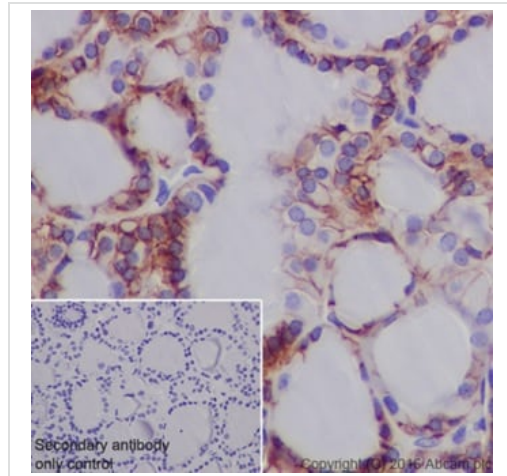
| | |
|-------------------------------|--|
| Function | Receptor for thyrotropin. Plays a central role in controlling thyroid cell metabolism. The activity of this receptor is mediated by G proteins which activate adenylate cyclase. Also acts as a receptor for thyrostimulin (GPA2+GPB5). |
| Tissue specificity | Expressed in the thyroid. |
| Involvement in disease | <p>Defects in TSHR are found in patients affected by hyperthyroidism with different etiologies. Somatic, constitutively activating TSHR mutations and/or constitutively activating G(s)alpha mutations have been identified in toxic thyroid nodules (TTNs) that are the predominant cause of hyperthyroidism in iodine deficient areas. These mutations lead to TSH independent activation of the cAMP cascade resulting in thyroid growth and hormone production. TSHR mutations are found in autonomously functioning thyroid nodules (AFTN), toxic multinodular goiter (TMNG) and hyperfunctioning thyroid adenomas (HTA). TMNG encompasses a spectrum of different clinical entities, ranging from a single hyperfunctioning nodule within an enlarged thyroid, to multiple hyperfunctioning areas scattered throughout the gland. HTA are discrete encapsulated neoplasms characterized by TSH-independent autonomous growth, hypersecretion of thyroid hormones, and TSH suppression. Defects in TSHR are also a cause of thyroid neoplasms (papillary and follicular cancers).</p> <p>Autoantibodies against TSHR are directly responsible for the pathogenesis and hyperthyroidism of Graves disease. Antibody interaction with TSHR results in an uncontrolled receptor stimulation.</p> <p>Hypothyroidism, congenital, non-goitrous, 1</p> <p>Familial gestational hyperthyroidism</p> <p>Hyperthyroidism, non-autoimmune</p> |
| Sequence similarities | Belongs to the G-protein coupled receptor 1 family. FSH/LSH/TSH subfamily. |

Contains 7 LRR (leucine-rich) repeats.

Cellular localization

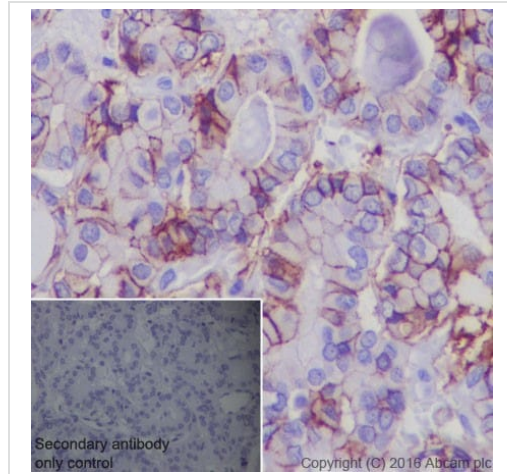
Cell membrane.

Images



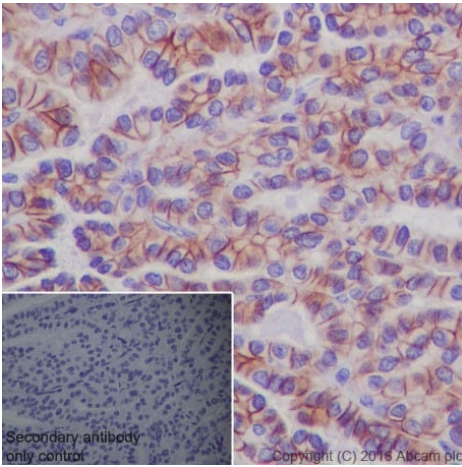
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TSH Receptor/TSH-R antibody [EPR19751] - BSA and Azide free (ab251559)

This data was developed using [ab218108](#), the same antibody clone in a different buffer formulation. Immunohistochemical analysis of paraffin-embedded human thyroid tissue labeling TSH Receptor/TSH-R with [ab218108](#) at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Membranous staining on human normal thyroid is observed. Counter stained with Hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



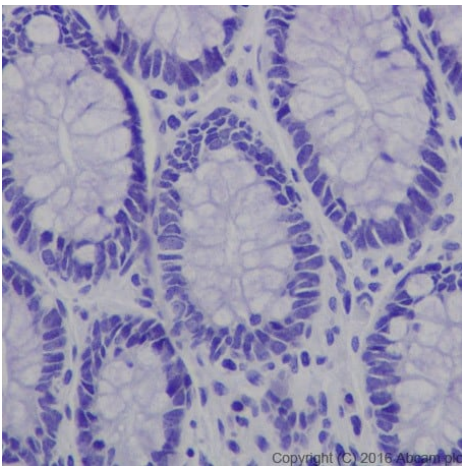
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TSH Receptor/TSH-R antibody [EPR19751] - BSA and Azide free (ab251559)

This data was developed using [ab218108](#), the same antibody clone in a different buffer formulation. Immunohistochemical analysis of paraffin-embedded human follicular thyroid adenocarcinoma tissue labeling TSH Receptor/TSH-R with [ab218108](#) at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Membranous staining on follicular thyroid adenocarcinoma is observed. Counter stained with Hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



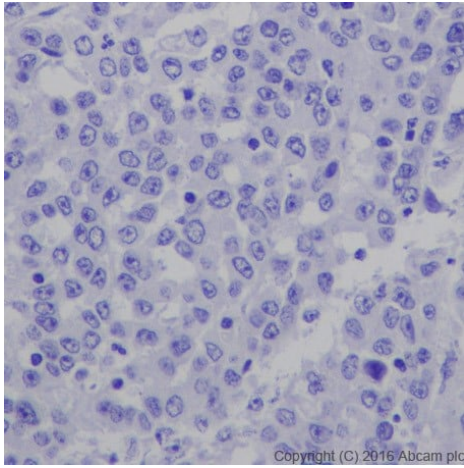
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TSH Receptor/TSH-R antibody [EPR19751] - BSA and Azide free (ab251559)

This data was developed using **ab218108**, the same antibody clone in a different buffer formulation. Immunohistochemical analysis of paraffin-embedded human papillary thyroid adenocarcinoma tissue labeling TSH Receptor/TSH-R with **ab218108** at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Membranous staining on papillary thyroid carcinoma is observed. Counter stained with Hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TSH Receptor/TSH-R antibody [EPR19751] - BSA and Azide free (ab251559)

This data was developed using **ab218108**, the same antibody clone in a different buffer formulation. Immunohistochemical analysis of paraffin-embedded human colon tissue labeling TSH Receptor/TSH-R with **ab218108** at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Negative staining on human normal colon [PMID: 22289392]. Counter stained with Hematoxylin. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



This data was developed using **ab218108**, the same antibody clone in a different buffer formulation. Immunohistochemical analysis of paraffin-embedded human gastric cancer tissue labeling TSH Receptor/TSH-R with **ab218108** at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Negative staining on gastric cancer. Counter stained with Hematoxylin. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TSH Receptor/TSH-R antibody [EPR19751] - BSA and Azide free (ab251559)

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-TSH Receptor/TSH-R antibody [EPR19751] - BSA and Azide free (ab251559)

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