

Product datasheet

Anti-Thyroglobulin antibody [SPM221] ab270725

1 Image

Overview

<b>Product name</b>	Anti-Thyroglobulin antibody [SPM221]
<b>Description</b>	Mouse monoclonal [SPM221] to Thyroglobulin
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Tissue, cells or virus. Human thyroid follicular cells.
<b>Positive control</b>	IHC-P: Human thyroid carcinoma tissue.
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</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>	pH: 7.2 Preservative: 0.05% Sodium azide Constituents: PBS, 0.05% BSA
<b>Purity</b>	Protein A/G purified
<b>Purification notes</b>	Purified from Bioreactor Concentrate.
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	SPM221
<b>Isotype</b>	IgG1
<b>Light chain type</b>	kappa

## Applications

---

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab270725 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 a concentration of 1 - 2 µg/ml. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

## Target

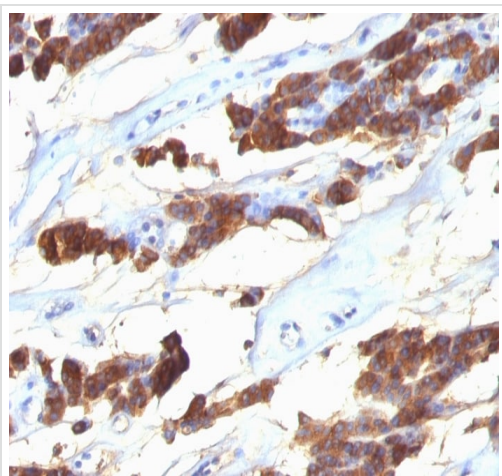
---

<b>Function</b>	Precursor of the iodinated thyroid hormones thyroxine (T4) and triiodothyronine (T3).
<b>Tissue specificity</b>	Thyroid gland specific.
<b>Involvement in disease</b>	<p>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.</p> <p>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.</p>
<b>Sequence similarities</b>	<p>Belongs to the type-B carboxylesterase/lipase family.</p> <p>Contains 11 thyroglobulin type-1 domains.</p>
<b>Post-translational modifications</b>	Sulfated tyrosines are desulfated during iodination.
<b>Cellular localization</b>	Secreted.

---

## Images

---



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thyroglobulin antibody [SPM221] (ab270725)

Formalin-fixed, paraffin-embedded human thyroid carcinoma stained for thyroglobulin using ab270725 at 2 µg/ml in immunohistochemical analysis.

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

### Our Abpromise to you: Quality guaranteed and expert technical support

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors