

# Anti-Thrombomodulin antibody [THBD/1782] ab219318

3 Images

## Overview

|                            |   |
|----------------------------|---|
| <b>Product name</b>        | Anti-Thrombomodulin antibody [THBD/1782]  |
| <b>Description</b>         | Mouse monoclonal [THBD/1782] to Thrombomodulin  |
| <b>Host species</b>        | Mouse   |
| <b>Tested applications</b> | <b>Suitable for:</b> IHC-P, Protein Array   |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Human   |
| <b>Immunogen</b>           | Recombinant fragment within Human Thrombomodulin aa 69-194. The exact sequence is proprietary.<br>Database link: <a href="#">P07204</a>   |
| <b>Positive control</b>    | IHC-P: Human placenta and human cervical carcinoma tissues.   |
| <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 long term. Avoid freeze / thaw cycle. |
| <b>Storage buffer</b>       | pH: 7.2<br>Preservative: 0.05% Sodium azide<br>Constituents: 99% PBS, 0.05% BSA   |
| <b>Purity</b>               | Protein A/G purified  |
| <b>Purification notes</b>   | ab219318 was purified from Bioreactor Concentrate by Protein A/G.   |
| <b>Clonality</b>            | Monoclonal  |
| <b>Clone number</b>         | THBD/1782   |
| <b>Isotype</b>              | IgG2a   |

**Light chain type**

kappa

**Applications****The Abpromise guarantee**

Our **Abpromise guarantee** covers the use of ab219318 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. |
| Protein Array |           | Use at an assay dependent concentration.   |

**Target****Function**

Thrombomodulin is a specific endothelial cell receptor that forms a 1:1 stoichiometric complex with thrombin. This complex is responsible for the conversion of protein C to the activated protein C (protein Ca). Once evolved, protein Ca scissions the activated cofactors of the coagulation mechanism, factor Va and factor VIIIa, and thereby reduces the amount of thrombin generated.

**Tissue specificity**

Endothelial cells are unique in synthesizing thrombomodulin.

**Involvement in disease**

Defects in THBD are the cause of thrombophilia due to thrombomodulin defect (THR-THBD) [MIM:188040]. A hemostatic disorder characterized by a tendency to thrombosis.

Defects in THBD are a cause of susceptibility to hemolytic uremic syndrome atypical type 6 (AHUS6) [MIM:612926]. An atypical form of hemolytic uremic syndrome. It is a complex genetic disease characterized by microangiopathic hemolytic anemia, thrombocytopenia, renal failure and absence of episodes of enterocolitis and diarrhea. In contrast to typical hemolytic uremic syndrome, atypical forms have a poorer prognosis, with higher death rates and frequent progression to end-stage renal disease. Note=Susceptibility to the development of atypical hemolytic uremic syndrome can be conferred by mutations in various components of or regulatory factors in the complement cascade system. Other genes may play a role in modifying the phenotype.

**Sequence similarities**

Contains 1 C-type lectin domain.

Contains 6 EGF-like domains.

**Post-translational modifications**

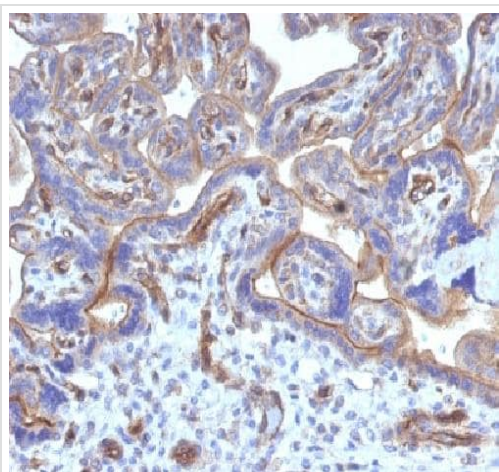
N-glycosylated.

The iron and 2-oxoglutarate dependent 3-hydroxylation of aspartate and asparagine is (R) stereospecific within EGF domains.

**Cellular localization**

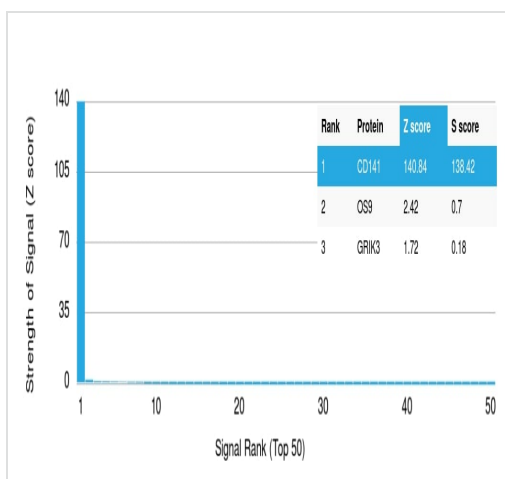
Membrane.

**Images**



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thrombomodulin antibody [THBD/1782] (ab219318)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded human placenta tissue labeling Thrombomodulin with ab219318 at 1 µg/ml dilution.

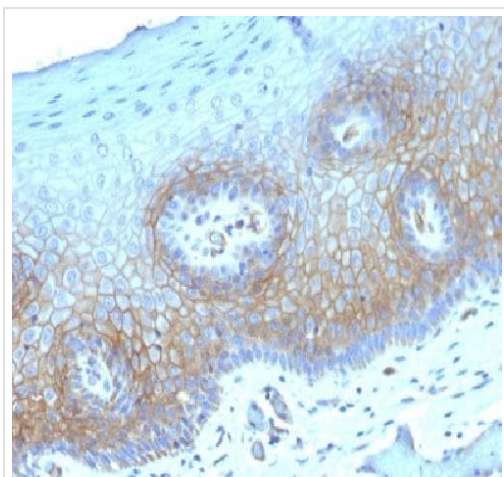


Protein Array - Anti-Thrombomodulin antibody [THBD/1782] (ab219318)

ab219318 was tested in protein array against over 19000 different full-length human proteins.

**Z- and S- Score:** The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target.

A MAb is specific to its intended target if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



Immunohistochemical analysis of formalin-fixed, paraffin-embedded human cervical carcinoma tissue labeling Thrombomodulin with ab219318 at 1 µg/ml dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thrombomodulin antibody [THBD/1782] (ab219318)

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

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