

Product datasheet

Anti-Thrombomodulin antibody [THBD/1591] ab218327

5 Images

Overview

Product name	Anti-Thrombomodulin antibody [THBD/1591]
Description	Mouse monoclonal [THBD/1591] to Thrombomodulin
Host species	Mouse
Tested applications	Suitable for: Protein Array, WB, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment within Human Thrombomodulin aa 69-194. The exact sequence is proprietary. Database link: P07204
Positive control	Human cervical carcinoma, bladder carcinoma, placenta and angiosarcoma tissues; THP1 cell lysate.
General notes	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>Please check that this product meets your needs before purchasing. 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, as well as customer reviews and Q&As.</p>

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 long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.05% Sodium azide Constituents: 99% PBS, 0.05% BSA
Purity	Protein A purified
Purification notes	ab218327 was purified from Bioreactor Concentrate by Protein A/G.
Clonality	Monoclonal
Clone number	THBD/1591
Isotype	IgG2b
Light chain type	kappa

Applications

Our [Abpromise guarantee](#) covers the use of **ab218327** 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
Protein Array		Use at an assay dependent concentration.
WB		Use a concentration of 0.5 - 1 µg/ml. Predicted molecular weight: 60 kDa.
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. (Primary incubation for 30 minutes at RT).

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

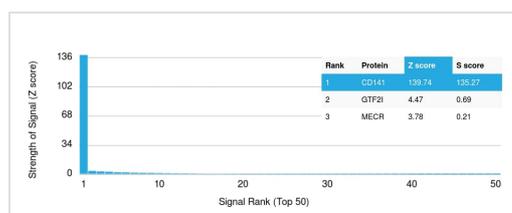
N-glycosylated.

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

Cellular localization

Membrane.

Images

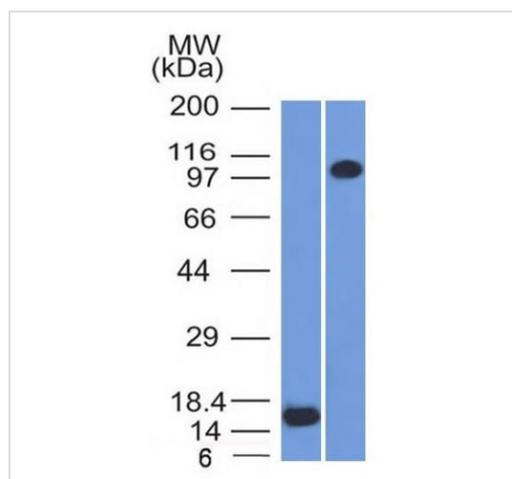


Protein Array - Anti-Thrombomodulin antibody
[THBD/1591] (ab218327)

ab218327 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.



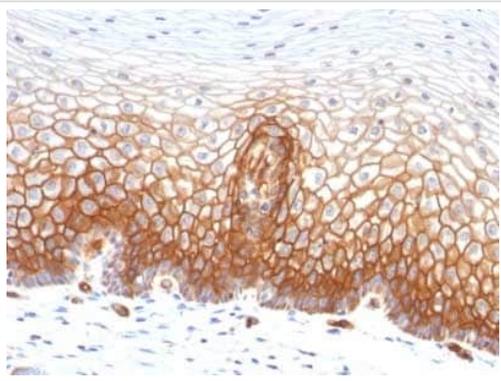
Western blot - Anti-Thrombomodulin antibody
[THBD/1591] (ab218327)

All lanes : Anti-Thrombomodulin antibody [THBD/1591]
(ab218327) at 1 µg/ml

Lane 1 : Recombinant Thrombomodulin protein

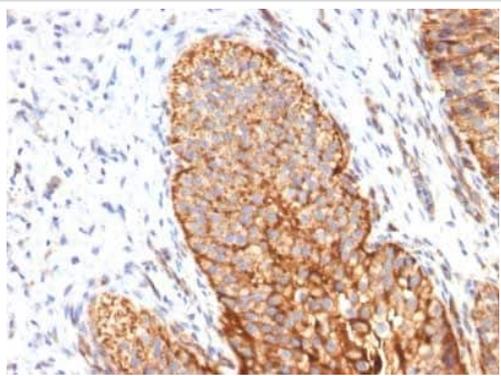
Lane 2 : THP1 cell lysate

Predicted band size: 60 kDa



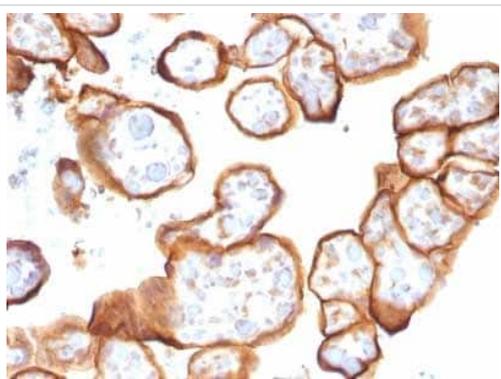
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thrombomodulin antibody [THBD/1591] (ab218327)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded human cervical carcinoma tissue labeling Thrombomodulin with ab218327 at 2 $\mu\text{g/ml}$.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thrombomodulin antibody [THBD/1591] (ab218327)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded human bladder carcinoma tissue labeling Thrombomodulin with ab218327 at 2 $\mu\text{g/ml}$.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thrombomodulin antibody [THBD/1591] (ab218327)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded human placenta tissue labeling Thrombomodulin with ab218327 at 2 $\mu\text{g/ml}$.

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