abcam

Product datasheet

Anti-Thrombomodulin antibody [EPR4051] - Low endotoxin, Azide free ab222292

יובעבלא RabMAb

画像数 12

製品の概要

製品名 Anti-Thrombomodulin antibody [EPR4051] - Low endotoxin, Azide free

製品の詳細 Rabbit monoclonal [EPR4051] to Thrombomodulin - Low endotoxin, Azide free

由来種 Rabbit

アプリケーション 適用あり: Flow Cyt (Intra), WB, IHC-P, ICC/IF, IP

種交差性 交差種: Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール THP-1, Human placenta and Human heart lysates; Human placenta tissue, Human squamous

cervical carcinoma tissue; A431 cells

特記事項 ab222292 is the carrier-free version of ab109189.

> 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.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

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.

Our Low endotoxin, azide-free formats have low endotoxin level (≤ 1 EU/ml, determined by the LAL assay) and are free from azide, to achieve consistent experimental results in functional assays.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

バッファー pH: 7.2

Constituent: PBS

キャリア・フリー はい

精製度 Protein A purified

ポリ/モノ モノクローナル

クローン名 EPR4051

アイソタイプ lgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab222292の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		Use at an assay dependent concentration. ab199376 - Rabbit monoclonal lgG (Low endotoxin, Azide free), is suitable for use as an isotype control with this antibody.
WB		Use at an assay dependent concentration. Predicted molecular weight: 60 kDa.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.

ターゲット情報

機能

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.

組織特異性

関連疾患

Endothelial cells are unique in synthesizing thrombomodulin.

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.

配列類似性 Contains 1 C-type lectin domain.

Contains 6 EGF-like domains.

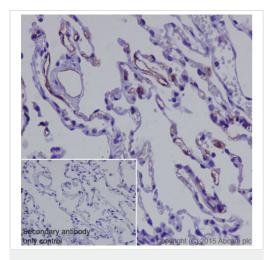
翻訳後修飾 N-glycosylated.

The iron and 2-oxoglutarate dependent 3-hydroxylation of aspartate and asparagine is (R)

stereospecific within EGF domains.

細胞内局在 Membrane.

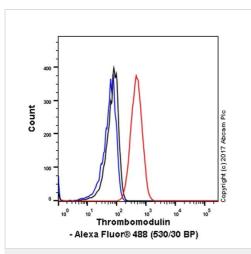
画像



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Thrombomodulin antibody [EPR4051] - Low endotoxin, Azide free (ab2222292)

Immunohistochemical staining of paraffin embedded human lung with purified <u>ab109189</u> at a working dilution of 1/1000. The secondary antibody used is HRP goat anti-rabbit lgG H&L (<u>ab97051</u>) at 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.

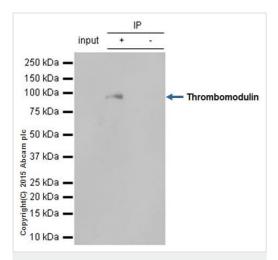
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109189).



Flow Cytometry (Intracellular) - Anti-Thrombomodulin antibody [EPR4051] - Low endotoxin, Azide free (ab222292)

Intracellular Flow Cytometry analysis of A431 (human epidermoid carcinoma) cells labeling Thrombomodulin with purified **ab109189** at 1/150 (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) (**ab150077**) (1/2000 dilution) was used as the secondary antibody. Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**) (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.

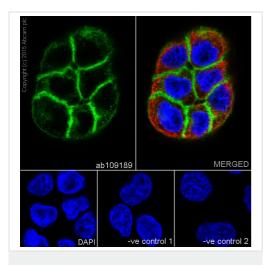
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109189).



Immunoprecipitation - Anti-Thrombomodulin antibody
[EPR4051] - Low endotoxin, Azide free (ab222292)

ab109189 (purified) at 1/90 immunoprecipitating thrombomodulin in 10 μg human placenta whole cell lysate (Lanes 1 and 2, observed at 100 kDa). Lane 3 - PBS. For western blotting, HRP Veriblot for IP (**ab131366**) was used for detection at 1/10000 dilution. Blocking buffer and concentration: 5% NFDM/TBST Dilution buffer and concentration: 5% NFDM/TBST

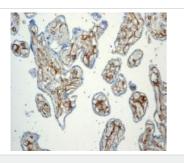
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab109189</u>).



Immunocytochemistry/ Immunofluorescence - Anti-Thrombomodulin antibody [EPR4051] - Low endotoxin, Azide free (ab222292)

Immunofluorescence staining of A431 cells with purified <u>ab109189</u> at a working dilution of 1/300, counter-stained with DAPI. The secondary antibody was Alexa Fluor[®] 488 goat anti-rabbit (<u>ab150077</u>), used at a dilution of 1/1000. <u>ab7291</u>, a mouse antitubulin antibody (1/1000), was used to stain tubulin along with <u>ab150120</u> (Alexa Fluor[®] 594 goat anti-mouse, 1/1000), shown in the top right hand panel. The cells were fixed in 4% PFA and permeabilized using 0.1% Triton X 100. The negative controls are shown in bottom middle and right hand panels - for negative control 1, purified <u>ab109189</u> was used at a dilution of 1/500 followed by an Alexa Fluor[®] 594 goat anti-mouse antibody (<u>ab150120</u>) at a dilution of 1/500. For negative control 2, <u>ab7291</u> (mouse antitubulin) was used at a dilution of 1/500 followed by an Alexa Fluor[®] 488 goat anti-rabbit antibody (<u>ab150077</u>) at a dilution of 1/400.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109189).



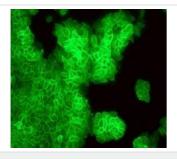
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Thrombomodulin antibody

[EPR4051] - Low endotoxin, Azide free (ab2222292)

Unpurified <u>ab109189</u>, at 1/100 dilution, staining Thrombomodulin in Human placenta tissue by Immunohistochemistry.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab109189</u>).

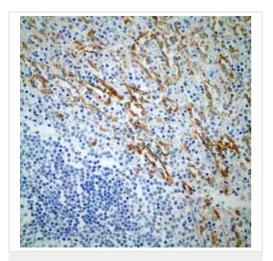
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-Thrombomodulin antibody [EPR4051] - Low endotoxin, Azide free (ab222292)

Unpurified <u>ab109189</u>, at 1/100 dilution, staining Thombomodulin in A431 cells by Immunofluorescence.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109189).

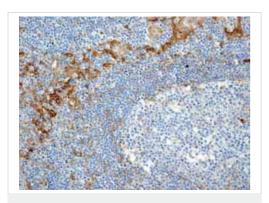


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Thrombomodulin antibody [EPR4051] - Low endotoxin, Azide free (ab222292)

Immunohistochemical analysis of paraffin embedded normal Human spleen tissue using unpurified <u>ab109189</u> showing +ve staining.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109189).

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

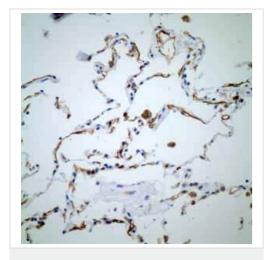


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Thrombomodulin antibody [EPR4051] - Low endotoxin, Azide free (ab222292)

Immunohistochemical analysis of paraffin embedded normal Human tonsil tissue using unpurified <u>ab109189</u> showing +ve staining.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109189).

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

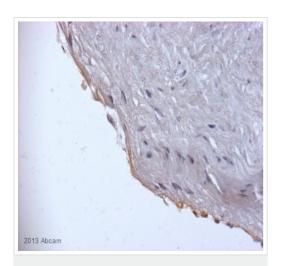


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Thrombomodulin antibody
[EPR4051] - Low endotoxin, Azide free (ab2222292)

Immunohistochemical analysis of paraffin embedded normal Human lung tissue using unpurified <u>ab109189</u> showing +ve staining.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109189).

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

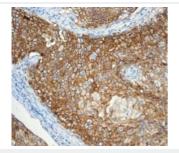


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Thrombomodulin antibody [EPR4051] - Low endotoxin, Azide free (ab2222292)

This image is courtesy of an anonymous Abreview.

Unpurified <u>ab109189</u> staining Thrombomodulin in Human artery tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 20% serum for 60 minutes at 21°C; antigen retrieval was by heat mediation in a citrate buffer. Samples were incubated with primary antibody (1/200) for 16 hours at 4°C. A Biotin-conjugated Goatanti-rabbit polyclonal (1/200) was used as the secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109189).

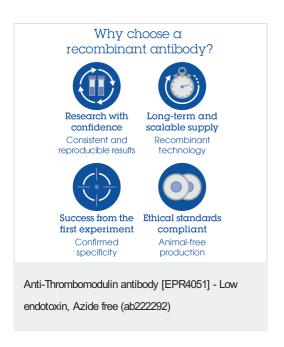


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Thrombomodulin antibody [EPR4051] - Low endotoxin, Azide free (ab222292)

This IHC data was generated using the same anti-Thrombomodulin antibody clone, EPR4051, in a different buffer formulation (cat# **ab109189**).

Unpurified <u>ab109189</u>, at 1/100 dilution, staining Thrombomodulin in Human squamous cervical carcinoma tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



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.co.jp/abpromise or contact our technical team.

Terms and conditions

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