abcam

Product datasheet

Anti-Thrombomodulin antibody [EPR18217-209] ab230010

重组 RabMAb

2 References 9图像

概述

产品名称 Anti-Thrombomodulin抗体[EPR18217-209]

描述 兔单克隆抗体[EPR18217-209] to Thrombomodulin

宿主 Rabbit

经测试应用 适用于: IHC-Fr, ICC/IF, IP, Flow Cyt, IHC-P, WB

种属反应性 与反应: Mouse

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: Mouse lung and placenta tissue lysates; bEND.3 whole cell lysate. IHC-P: Mouse lung and

stomach tissues. IHC-Fr: Mouse embryo E14.5 (developing lung) tissue. ICC/IF: bEND.3 cells.

Flow Cyt: bEND.3 cells. IP: bEND.3 whole cell lysate; Mouse lung tissue lysate.

常规说明 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

性能

形式 Liquid

存放说明 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.

存储溶液 pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

纯度 Protein A purified

克隆 单克隆

EPR18217-209 克隆编号

同种型 IgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab230010于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

| 应用 | Ab评论 | 说明 |
|----------|------|---|
| IHC-Fr | | 1/500. Perform heat mediated antigen retrieval by using sodium citrate buffer (10 mM citrate pH 6.0 + 0.05% Tween-20). |
| ICC/IF | | 1/100. |
| IP | | 1/30. |
| Flow Cyt | | 1/500. |
| IHC-P | | 1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. |
| WB | | 1/1000. Detects a band of approximately 75,105 kDa (predicted molecular weight: 62 kDa). |

靶标

功能

组织**特异性**

疾病相关

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.

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.

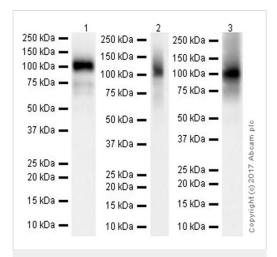
序列相似性 Contains 1 C-type lectin domain.

Contains 6 EGF-like domains.

翻译后修饰 N-glycosylated.

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

图片



Western blot - Anti-Thrombomodulin antibody [EPR18217-209] (ab230010) **All lanes :** Anti-Thrombomodulin antibody [EPR18217-209] (ab230010) at 1/1000 dilution

Lane 1: Mouse lung tissue lysate at 20 µg

Lane 2: bEND.3 (mouse brain endothelioma cell line) whole cell

lysate at 10 µg

Lane 3: Mouse placenta tissue lysate at 10 µg

Secondary

Lane 1 : Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/100000 dilution

Lanes 2-3: Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/50000 dilution

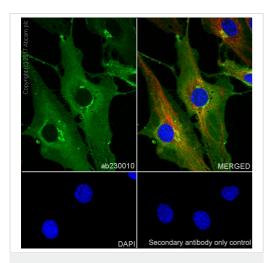
Developed using the ECL technique.

Predicted band size: 62 kDa **Observed band size:** 105,75 kDa

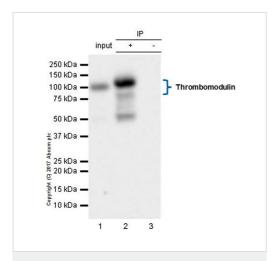
Exposure times: Lane 1: 1 minute; Lane 2: 20 seconds; Lane 3: 10 seconds.

Blocking/Dilution buffer: 5% NFDM/TBST.

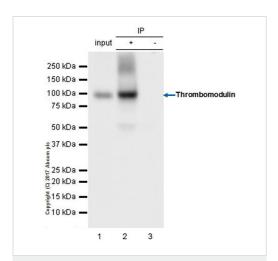
The blot was developed on a BIO-RAD® ChemiDoc™ MP instrument.



Immunocytochemistry/ Immunofluorescence - Anti-Thrombomodulin antibody [EPR18217-209] (ab230010)



Immunoprecipitation - Anti-Thrombomodulin antibody [EPR18217-209] (ab230010)



Immunoprecipitation - Anti-Thrombomodulin antibody [EPR18217-209] (ab230010)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized bEND.3 (mouse brain endothelioma cell line) cells labeling Thrombomodulin with ab230010 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic and membranous staining in bEND.3 cell line (PMID: 7622601; PMID: 8223719).

The nuclear counterstain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (ab195889) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution.

Thrombomodulin was immunoprecipitated from 0.35 mg of mouse lung tissue lysate with ab230010 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab230010 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/5000 dilution.

Lane 1: Mouse lung tissue lysate 10 µg (Input).

Lane 2: ab230010 IP in mouse lung tissue lysate.

Lane 3: Rabbit monoclonal lgG (<u>ab172730</u>) instead of ab230010 in mouse lung tissue lysate.

Exposure time: 10 seconds.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Thrombomodulin was immunoprecipitated from 0.35 mg of bEND.3 (mouse brain endothelioma cell line) whole cell lysate with ab230010 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab230010 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/5000 dilution.

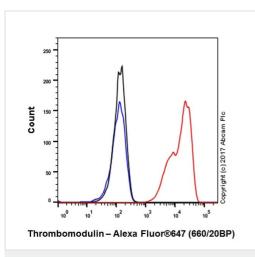
Lane 1: bEND.3 whole cell lysate 10 µg (Input).

Lane 2: ab230010 IP in bEND.3 whole cell lysate.

Lane 3: Rabbit monoclonal lgG (<u>ab172730</u>) instead of ab230010 in bEND.3 whole cell lysate.

Exposure time: 10 seconds.

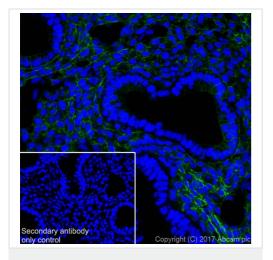
Blocking and dilution buffer and concentration: 5% NFDM/TBST.



Flow Cytometry - Anti-Thrombomodulin antibody [EPR18217-209] (ab230010)

Flow cytometric analysis of bEND.3 (mouse brain endothelioma cell line) cells labeling Thrombomodulin with ab230010 at 1/500 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (ab172730) (black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077), at 1/2000 dilution was used as the secondary antibody.

Gated on total viable cells.

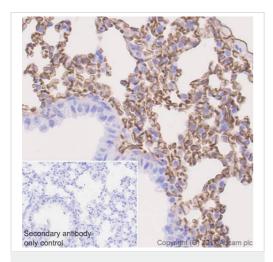


Immunohistochemistry (Frozen sections) - Anti-Thrombomodulin antibody [EPR18217-209] (ab230010)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen mouse embryo E14.5 (developing lung) tissue labeling Thrombomodulin with ab230010 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) at 1/1000 dilution (green). Positive membrane staining in the developing lung in mouse E14.5 embryo (PMID: 28306049) is observed.

The nuclear counterstain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (Alexa Fluor[®] 488) (<u>ab150077</u>) at 1/1000 dilution.

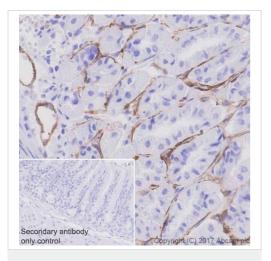


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Thrombomodulin antibody [EPR18217-209] (ab230010)

Immunohistochemical analysis of paraffin-embedded mouse lung tissue labeling Thrombomodulin with ab230010 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Positive staining on endothelial cells of mouse lung (PMID: 23946288; PMID: 10231031) is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG 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 paraffinembedded sections) - Anti-Thrombomodulin antibody [EPR18217-209] (ab230010)

Immunohistochemical analysis of paraffin-embedded mouse stomach tissue labeling Thrombomodulin with ab230010 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Positive staining on endothelial cells of mouse stomach (PMID: 23946288; PMID: 10231031) is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Anti-Thrombomodulin antibody [EPR18217-209] (ab230010)

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