

# Anti-Thrombomodulin antibody [EPR4051] ab109189

重组 RabMAb

★★★★★ 4 Abreviews 11 References 14 图像

### 概述

产品名称	Anti-Thrombomodulin抗体[EPR4051]
描述	兔单克隆抗体[EPR4051] to Thrombomodulin
宿主	Rabbit
经测试应用	适用于: Flow Cyt (Intra), WB, IP, IHC-P, ICC/IF
种属反应性	与反应: Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	THP-1, Human placenta and Human heart lysates; Human placenta tissue, Human squamous cervical carcinoma tissue; A431 cells
常规说明	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

### 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. Stable for 12 months at -20°C.
存储溶液	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 40% Glycerol, 0.05% BSA, PBS</p>
纯度	Protein A purified
克隆	单克隆

EPR4051

IgG

**Abpromise™** 承诺保证使用ab109189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
Flow Cyt (Intra)		Use at an assay dependent concentration. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★★ (1)	1/1000 - 1/10000. Predicted molecular weight: 60 kDa.
IP		1/10 - 1/100.
IHC-P	★★★★★ (2)	1/100 - 1/1000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See <b><u>IHC antigen retrieval protocols</u></b> .
ICC/IF		1/100 - 1/300.

## 功能

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.

Endothelial cells are unique in synthesizing thrombomodulin.

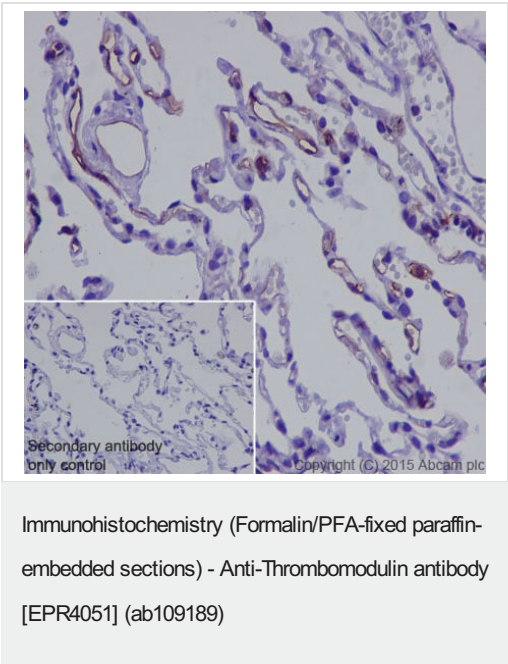
Defects in THBD are the cause of thrombophilia due to thrombomodulin defect (THR-THBD) [MIM:188040]. A hemostatic disorder characterized by a tendency to thrombosis.

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.

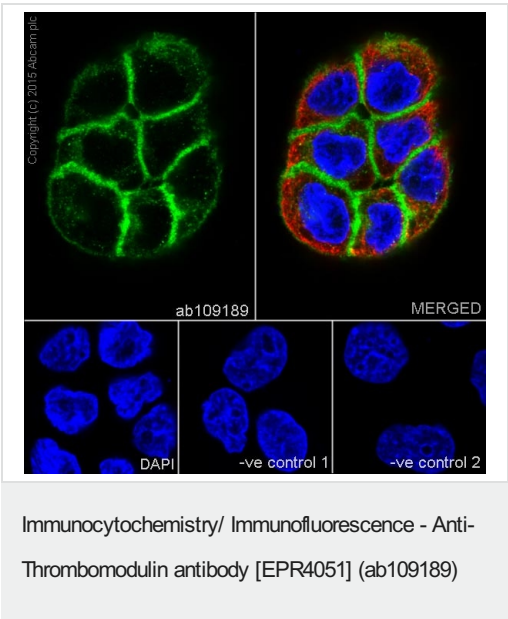
Contains 1 C-type lectin domain.  
Contains 6 EGF-like domains.

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

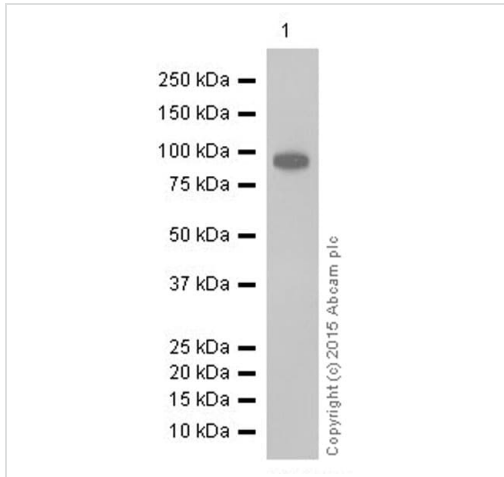
图片



Immunohistochemical staining of paraffin embedded human lung with purified ab109189 at a working dilution of 1/1000. The secondary antibody used is HRP goat anti-rabbit IgG H&L ([ab97051](#)) at 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was performed 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.



Immunofluorescence staining of A431 cells with purified ab109189 at a working dilution of 1/300, counter-stained with DAPI. The secondary antibody was Alexa Fluor<sup>®</sup> 488 goat anti-rabbit ([ab150077](#)), used at a dilution of 1/1000. [ab7291](#), a mouse anti-tubulin antibody (1/1000), was used to stain tubulin along with [ab150120](#) (Alexa Fluor<sup>®</sup> 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 ab109189 was used at a dilution of 1/500 followed by an Alexa Fluor<sup>®</sup> 594 goat anti-mouse antibody ([ab150120](#)) at a dilution of 1/500. For negative control 2, [ab7291](#) (mouse anti-tubulin) was used at a dilution of 1/500 followed by an Alexa Fluor<sup>®</sup> 488 goat anti-rabbit antibody ([ab150077](#)) at a dilution of 1/400.



Western blot - Anti-Thrombomodulin antibody  
[EPR4051] (ab109189)

Anti-Thrombomodulin antibody [EPR4051] (ab109189) at 1/10000 dilution (purified) + human placenta lysate at 10 µg

### Secondary

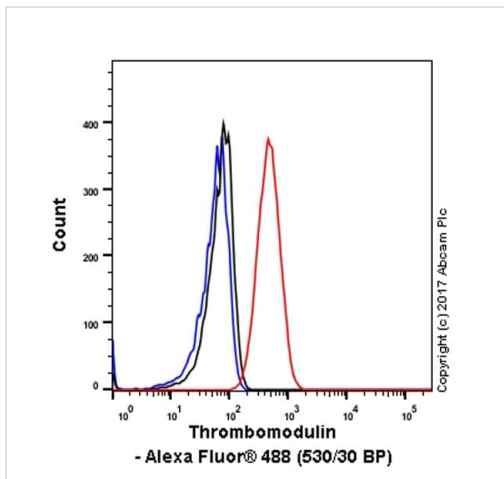
HRP goat anti-rabbit IgG (H+L) at 1/1000 dilution

**Predicted band size:** 60 kDa

**Observed band size:** 100 kDa

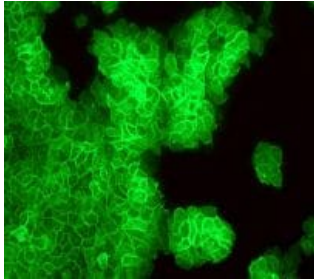
Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



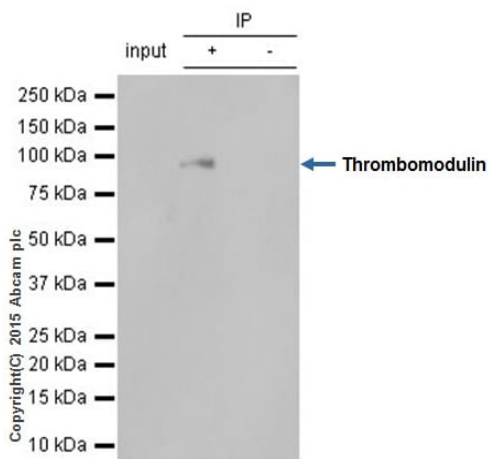
Flow Cytometry (Intracellular) - Anti-Thrombomodulin  
antibody [EPR4051] (ab109189)

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.



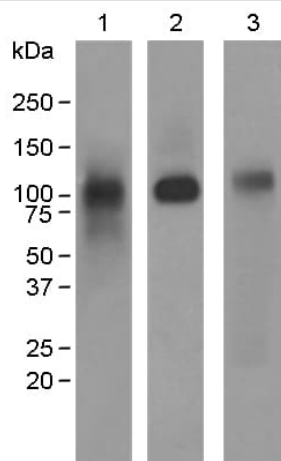
Unpurified ab109189, at 1/100 dilution, staining Thrombomodulin in A431 cells by Immunofluorescence.

Immunocytochemistry/ Immunofluorescence - Anti-Thrombomodulin antibody [EPR4051] (ab109189)



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, VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)), was used for detection at 1/10,000 dilution. Blocking buffer and concentration: 5% NFDm/TBST Dilution buffer and concentration: 5% NFDm/TBST

Immunoprecipitation - Anti-Thrombomodulin antibody [EPR4051] (ab109189)



Western blot - Anti-Thrombomodulin antibody [EPR4051] (ab109189)

**All lanes :** Anti-Thrombomodulin antibody [EPR4051] (ab109189) at 1/1000 dilution (unpurified)

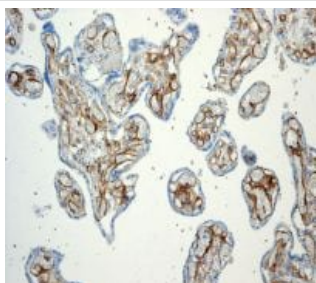
**Lane 1 :** THP-1 cell lysate

**Lane 2 :** Human placenta lysate

**Lane 3 :** Human heart lysate

Lysates/proteins at 10 µg per lane.

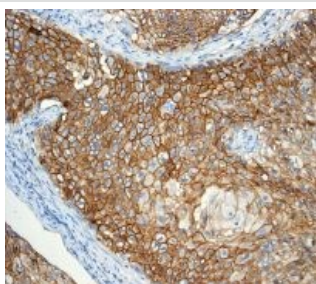
**Predicted band size:** 60 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thrombomodulin antibody [EPR4051] (ab109189)

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

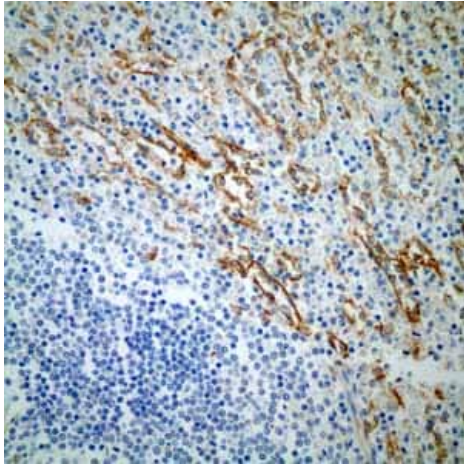
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thrombomodulin antibody [EPR4051] (ab109189)

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

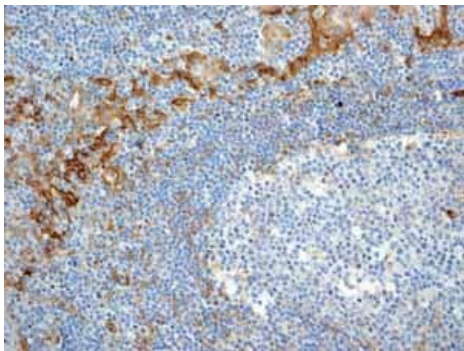
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thrombomodulin antibody [EPR4051] (ab109189)

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

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

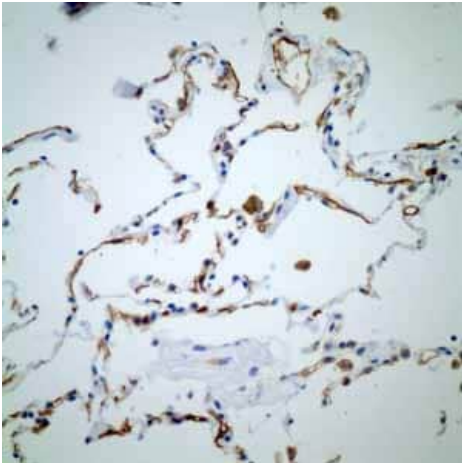


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thrombomodulin antibody [EPR4051] (ab109189)

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

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

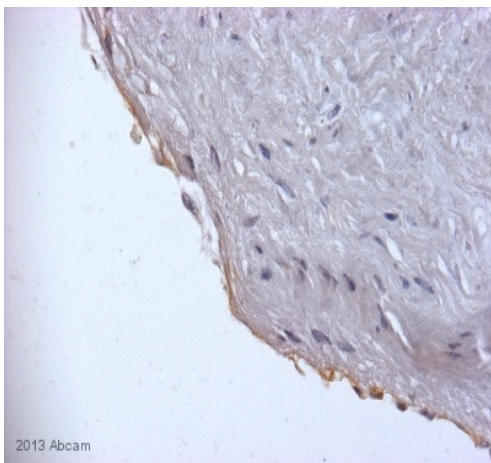




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thrombomodulin antibody [EPR4051] (ab109189)

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

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thrombomodulin antibody [EPR4051] (ab109189)

This image is courtesy of an anonymous Abreview

Unpurified ab109189 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.



### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-Thrombomodulin antibody [EPR4051]  
(ab109189)

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