

**THBD Antibody (C-Term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP22243b****Specification**

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**THBD Antibody (C-Term) - Product Information**

Application	WB, FC,E
Primary Accession	<a href="#">P07204</a>
Other Accession	<a href="#">Q71U07</a>
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	60329

**THBD Antibody (C-Term) - Additional Information****Gene ID** 7056**Other Names**

Thrombomodulin, TM, Fetomodulin, CD141, THBD, THRM

**Target/Specificity**

This THBD antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 537-571 amino acids from human THBD.

**Dilution**

WB~~1:2000

FC~~1:25

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

THBD Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

**THBD Antibody (C-Term) - Protein Information****Name** THBD**Synonyms** THRM

**Function** Endothelial cell receptor that plays a critical role in regulating several physiological processes including hemostasis, coagulation, fibrinolysis, inflammation, and angiogenesis (PubMed:[10761923](#)). Acts as a cofactor for thrombin activation of protein C/PROC on the surface of vascular endothelial cells leading to initiation of the activated protein C anticoagulant pathway (PubMed:[29323190](#), PubMed:[33836597](#), PubMed:[9395524](#)). Also accelerates the activation of the plasma carboxypeptidase B2/CPB2, which catalyzes removal of C-terminal basic amino acids from its substrates including kinins or anaphylatoxins leading to fibrinolysis inhibition (PubMed:[26663133](#)). Plays critical protective roles in changing the cleavage specificity of protease-activated receptor 1/PAR1, inhibiting endothelial cell permeability and inflammation (By similarity). Suppresses inflammation distinctly from its anticoagulant cofactor activity by sequestering HMGB1 thereby preventing it from engaging cellular receptors such as RAGE and contributing to the inflammatory response (PubMed:[15841214](#)).

#### Cellular Location

Membrane; Single-pass type I membrane protein.

#### Tissue Location

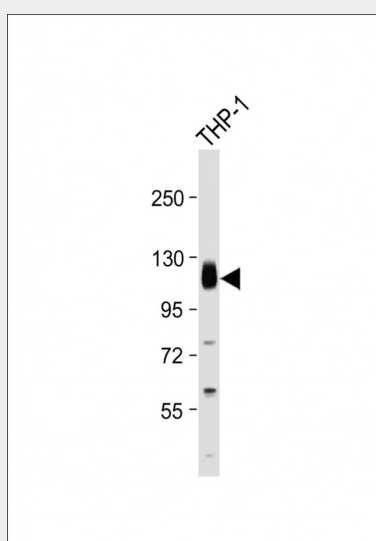
Endothelial cells are unique in synthesizing thrombomodulin

### THBD Antibody (C-Term) - Protocols

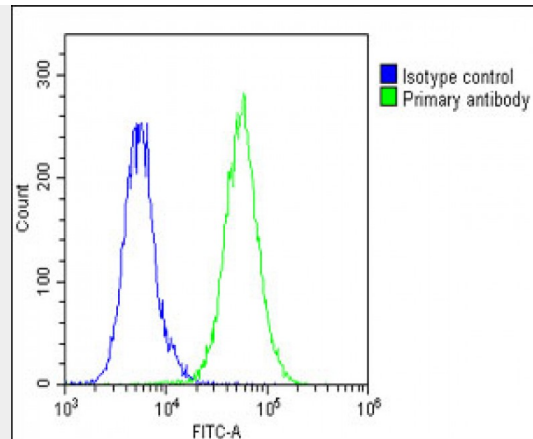
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### THBD Antibody (C-Term) - Images



Anti-THBD Antibody (C-Term) at 1:2000 dilution + THP-1 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 60 kDa Blocking/Dilution buffer: 5% NFDN/TBST.



Overlay histogram showing A549 cells stained with AP22243b (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22243b, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed (1583138) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1 µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >10,000 events was performed.

#### THBD Antibody (C-Term) - Background

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.

#### THBD Antibody (C-Term) - References

- Suzuki K., et al. EMBO J. 6:1891-1897 (1987).
- Wen D., et al. Biochemistry 26:4350-4357 (1987).
- Jackman R.W., et al. Proc. Natl. Acad. Sci. U.S.A. 84:6425-6429 (1987).
- Shirai T., et al. J. Biochem. 103:281-285 (1988).
- Deloukas P., et al. Nature 414:865-871 (2001).