

THBD Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50031**Specification**

THBD Antibody - Product Information

Application	WB
Primary Accession	P07204
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	60 KDa
Antigen Region	550-575

THBD Antibody - Additional Information**Gene ID** 7056**Other Names**

Thrombomodulin, TM, Fetomodulin, CD141, THBD, THRM

Dilution

WB~~ 1:1000

FormatRabbit IgG in phosphate buffered saline (without Mg²⁺ and Ca²⁺), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.**Storage Conditions**

-20°C

THBD Antibody - 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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/29323190), PubMed: [33836597](http://www.uniprot.org/citations/33836597), PubMed: [9395524](http://www.uniprot.org/citations/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

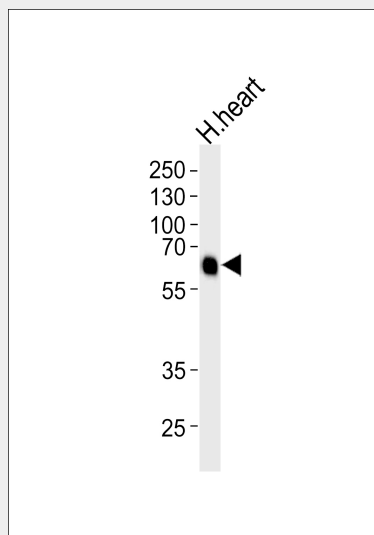
Endothelial cells are unique in synthesizing thrombomodulin

THBD Antibody - 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 - Images



Western blot analysis of lysates from H.heart cell line, using THBD Antibody (C19104). C19104 was diluted at 1:1000. A goat anti-rabbit IgG H&L (HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug.

THBD Antibody - 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 - 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).