

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

Format

Rabbit 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). 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

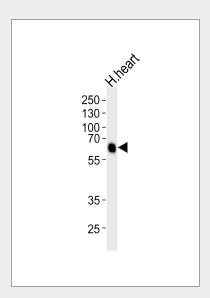
Endothelial cells are unique in synthesizing thrombomodulin

THBD Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- 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





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(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).