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THBD Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50031

Product Information

Application	WB
Primary Accession	P07204
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Calculated MW	60329

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℃

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

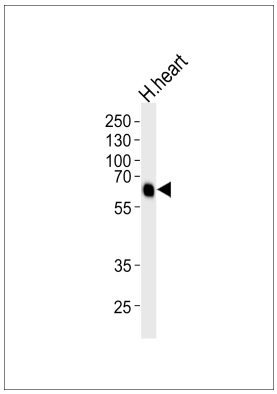
Background

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.

References

Suzuki K.,et al.EMBO J. 6:1891-1897(1987).
Wen D.,et al.Biochemistry 26:4350-4357(1987).
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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.

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