

Thrombomodulin Antibody

Rabbit mAb Catalog # AP90322

Specification

Thrombomodulin Antibody - Product Information

Application WB, IHC, ICC, IP

Primary Accession P07204
Clonality Monoclonal

Other Names

CD141; Fetomodulin; THBD; THRM; thrombomodulin; TM;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 60329 Da

Thrombomodulin Antibody - Additional Information

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

Thrombomodulin

Description Thrombomodulin (TM), also called CD141,

is a type I membrane receptor that is specific to endothelial cells. TM has a cysteine-rich extracellular domain with six EGF-like regions. It forms a complex with Thrombin, which activates Protein C to generate activated Protein C (APC), an anticoagulant enzyme. APC together with

Protein S inhibits coagulation by

inactivating Factors Va and VIIIa. Deletion

of the TM gene results in embryonic

lethality in mice.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

Thrombomodulin 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" target="_blank">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

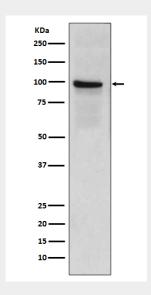
Endothelial cells are unique in synthesizing thrombomodulin

Thrombomodulin Antibody - Protocols

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

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

Thrombomodulin Antibody - Images



Western blot analysis of Thrombomodulin expression in human placenta lysate.