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Thrombomodulin Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP6779c

Specification

Thrombomodulin Antibody (Center) Blocking Peptide - Product Information

Primary Accession P07204

Thrombomodulin Antibody (Center) Blocking Peptide - Additional Information

Gene ID 7056

Other Names
Thrombomodulin, TM, Fetomodulin, CD141, THBD, THRM

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP6779c was selected from the Center region of human Thrombomodulin. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Thrombomodulin Antibody (Center) Blocking Peptide - 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

Thrombomodulin Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

Thrombomodulin Antibody (Center) Blocking Peptide - Images

Thrombomodulin Antibody (Center) Blocking Peptide - Background

Thrombomodulin is an endothelial-specific type I membrane receptor that binds thrombin. This binding results in the activation of protein C, which degrades clotting factors Va and VIIIa and reduces the amount of thrombin generated.

Thrombomodulin Antibody (Center) Blocking Peptide - References

Kajimoto,H., et.al., Circ. J. 73 (9), 1705-1710 (2009)