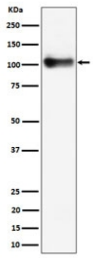
Thbd Antibody / Thrombomodulin [clone 28T28] (RQ8267)

Catalog No.	Formulation	Size
RQ8267	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 weeks
Species Reactivity	Mouse, Rat
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	28T28
Purity	Affinity chromatography
UniProt	P15306
Applications	Western blot: 1:500-1:2000
Limitations	This Thbd antibody is available for research use only.



THBD Antibody immunoblotting. Western blot analysis of Thrombomodulin / THBD expression using clone 28T28 antibody in mouse lung tissue lysate. Lane 1: mouse lung lysate. A band is detected at approximately 100 kDa, consistent with the predicted molecular weight of Thrombomodulin / THBD and the known glycosylated form of this endothelial membrane receptor. The predicted molecular weight of the unmodified protein is approximately 60 kDa, while glycosylation commonly results in a higher apparent molecular weight in SDS-PAGE.

Description

Thrombomodulin (THBD) is a vascular endothelial membrane glycoprotein expressed on the luminal surface of endothelial cells that line blood vessels throughout the body. THBD Antibody is widely used to detect thrombomodulin expression in studies of vascular biology where the protein appears as a membrane-associated receptor concentrated along endothelial cell surfaces. Because thrombomodulin is consistently expressed in vascular endothelium, detection of THBD allows investigators to visualize blood vessel structures and examine endothelial organization in both normal tissues and tumor-associated vasculature.

THBD antibody, also referred to as thrombomodulin antibody and CD141 antibody in the literature, recognizes a transmembrane receptor that regulates thrombin activity and participates in anticoagulant signaling within blood vessels. Binding of thrombin to thrombomodulin on endothelial cell membranes shifts thrombin activity toward activation of the protein C anticoagulant pathway, a regulatory mechanism that helps maintain vascular homeostasis. Through this receptor-mediated process thrombomodulin plays an important role in balancing coagulation and inflammatory signaling within the vascular endothelium.

In histological tissue sections, thrombomodulin staining typically appears as membranous labeling of endothelial cells lining arteries, veins, and capillaries across a wide range of organs. This staining pattern allows investigators to visualize vascular networks and examine endothelial distribution within tissues. Endothelial cells highlighted by THBD antibody define the vascular framework that supports tissue perfusion and oxygen delivery. Visualization of these vascular structures is therefore commonly used in studies examining vascular organization, endothelial differentiation, and blood vessel biology.

Thrombomodulin expression may also highlight vascular structures associated with tumors where endothelial cells form the blood vessels that support tumor growth. Tumors frequently develop extensive vascular networks that supply oxygen and nutrients to malignant tissues. Detection of THBD within these vascular structures allows investigators to study vascular organization and blood vessel distribution within tumor microenvironments and to examine vascular changes associated with tumor progression.

Clone 28T28 is a recombinant rabbit monoclonal antibody designed to recognize thrombomodulin expression in research applications. Recombinant monoclonal antibodies provide consistent performance and specificity for target detection. When used in experimental studies, THBD Antibody enables investigators to analyze thrombomodulin expression and examine vascular structures formed by endothelial cells in both normal tissues and tumor-associated vasculature.

Application Notes

Optimal dilution of the Thbd antibody should be determined by the researcher.

Immunogen

A synthetic peptide derived from human Thrombomodulin was used as the immunogen for the Thbd antibody.

Storage

Store the Thbd antibody at -20oC.

Alternate Names

THBD antibody, Thrombomodulin antibody, CD141 antibody, Endothelial thrombomodulin antibody, Vascular thrombomodulin antibody

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