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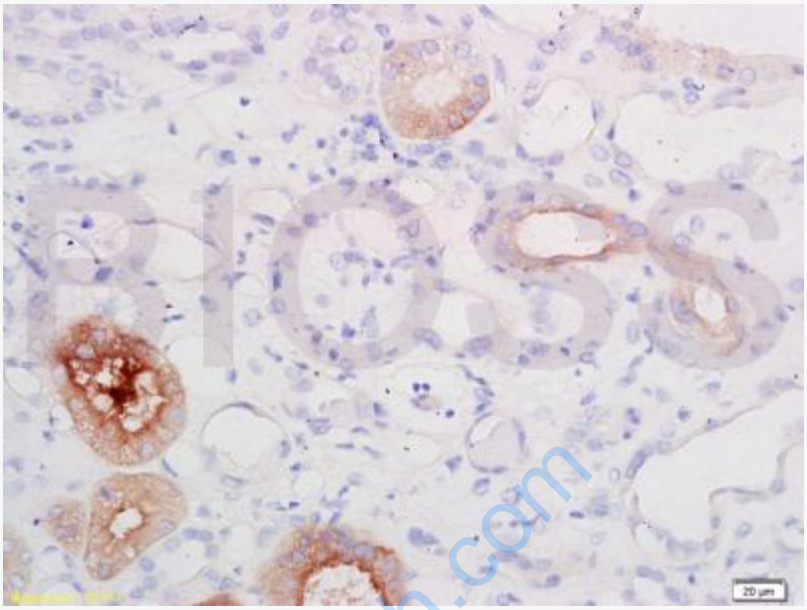
Rabbit Anti-Thrombomodulin antibody

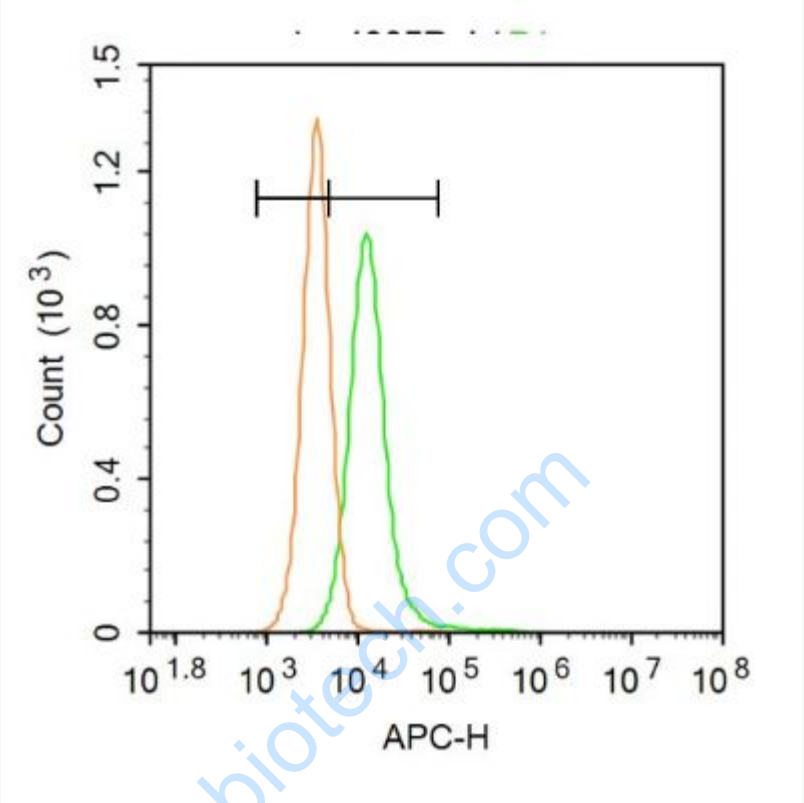
SL0525R

Product Name:	Thrombomodulin
Chinese Name:	血栓调节蛋白抗体
Alias:	Thrombomodulin; CD 141; CD141; CD141 antigen; Fetomodulin; THBD; THRM; TM; AHUS 6; AHUS6; BDCA 3; BDCA3; THPH12; TRBM_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Cow,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=3μg/TestICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	61kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from mouse Thrombomodulin:301-400/575<Extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Thrombomodulin, TM is cell surface glycoprotein; plays an important role in the protein C anticoagulant pathway. It located in a vein, artery and capillary endothelial cells on the surface of plasma membrane protein. It is generally believed: TM vascular endothelial injury is an important parameter is the thrombin receptor, known in a variety of normal human tissues, can also be expressed in many tumors, TM may be similar to the E-

	cadherin,and is a lectin Like activity of a new class of members of the cell adhesion molecules. CD141/Thrombomodulin is an exclusively endothelial cell surface glycoprotein that forms a 1:1 complex with thrombin. Binding of thrombin to this high-affinity receptor alters its specificity toward several substrates. The complex activates protein C approximately 1000 times faster than thrombin alone. Activated protein C degrades clotting factors V and VIII; thus, thrombomodulin converts thrombin into a physiologic anticoagulant. Thrombomodulin is also found in the circulatory and urinary systems, the physiologic significance of this is obscure. **Function:** 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. **Subcellular Location:** Membrane; Single-pass type I membrane protein. **Tissue Specificity:** Endothelial cells are unique in synthesizing thrombomodulin. **Post-translational modifications:** N-glycosylated. The iron and 2-oxoglutarate dependent 3-hydroxylation of aspartate and asparagine is (R) stereospecific within EGF domains. **DISEASE:** Defects in THBD are the cause of thrombophilia due to thrombomodulin defect (THPH12) [MIM:614486]. A hemostatic disorder characterized by a tendency to thrombosis. Defects in THBD are a cause of susceptibility to hemolytic uremic syndrome atypical type 6 (AHUS6) [MIM:612926]. An atypical form of hemolytic uremic syndrome. It is a complex genetic disease characterized by microangiopathic hemolytic anemia, thrombocytopenia, renal failure and absence of episodes of enterocolitis and diarrhea. In contrast to typical hemolytic uremic syndrome, atypical forms have a poorer prognosis, with higher death rates and frequent progression to end-stage renal disease. Note=Susceptibility to the development of atypical hemolytic uremic syndrome can be conferred by mutations in various components of or regulatory factors in the complement cascade system. Other genes may play a role in modifying the phenotype. **Similarity:** Contains 1 C-type lectin domain. Contains 6 EGF-like domains.

	SWISS: P07204 **Gene ID:** 7056 **Database links:** Entrez Gene: 7056 Human Omim: 188040 Human SwissProt: P07204 Human Unigene: 2030 Human **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. 血栓调节蛋白(thrombomodulin,TM)是一种分布于静脉、动脉和毛细vascular endothelial cell表面的质膜蛋白。 一般认为:TM是血管内皮损伤的重要参数，也是凝血酶的受体，已知在人类多种正常组织中表达，亦可表达于许多Tumour组织，TM可能类似于钙粘蛋白，是具有凝集素样活性的新一类Cell adhesion molecule的成员。TM是vascular endothelial cell膜上的凝血酶受体之一。与凝血酶结合后可降低凝血酶的凝血活性，而加强其激活蛋白C的活性。由于被激活的蛋白C具有抗凝作用，因此，TM是使凝血酶由促凝转向抗凝的重要的血管内凝血抑制因子。

Picture:	 （IHC）Immunohistochemistry Tissue/cell: human kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min; Incubation: Anti-Thrombomodulin Polyclonal Antibody, Unconjugated(SL0525R) 1:300, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control: A431.

Primary Antibody (green line): Rabbit Anti-Thrombomodulin antibody (SL0525R)

Dilution: 3μg /10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody: Goat anti-rabbit IgG-AF647

Dilution: 3μg /test.

Protocol

The cells were incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.