



## Rabbit Anti-Thrombomodulin antibody

SL10212R

<b>Product Name:</b>	Thrombomodulin
<b>Chinese Name:</b>	血栓调节蛋白抗体
<b>Alias:</b>	Thrombomodulin; CD 141; CD141; CD141 antigen; Fetomodulin; THBD; THRM; TM; AHUS 6; AHUS6; BDCA 3; BDCA3; THPH12; TRBM_HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Cow,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=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.
<b>Molecular weight:</b>	61kDa
<b>Cellular localization:</b>	The cell membraneExtracellular matrix
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from mouse Thrombomodulin/CD141:301-400/575<Extracellular>
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	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

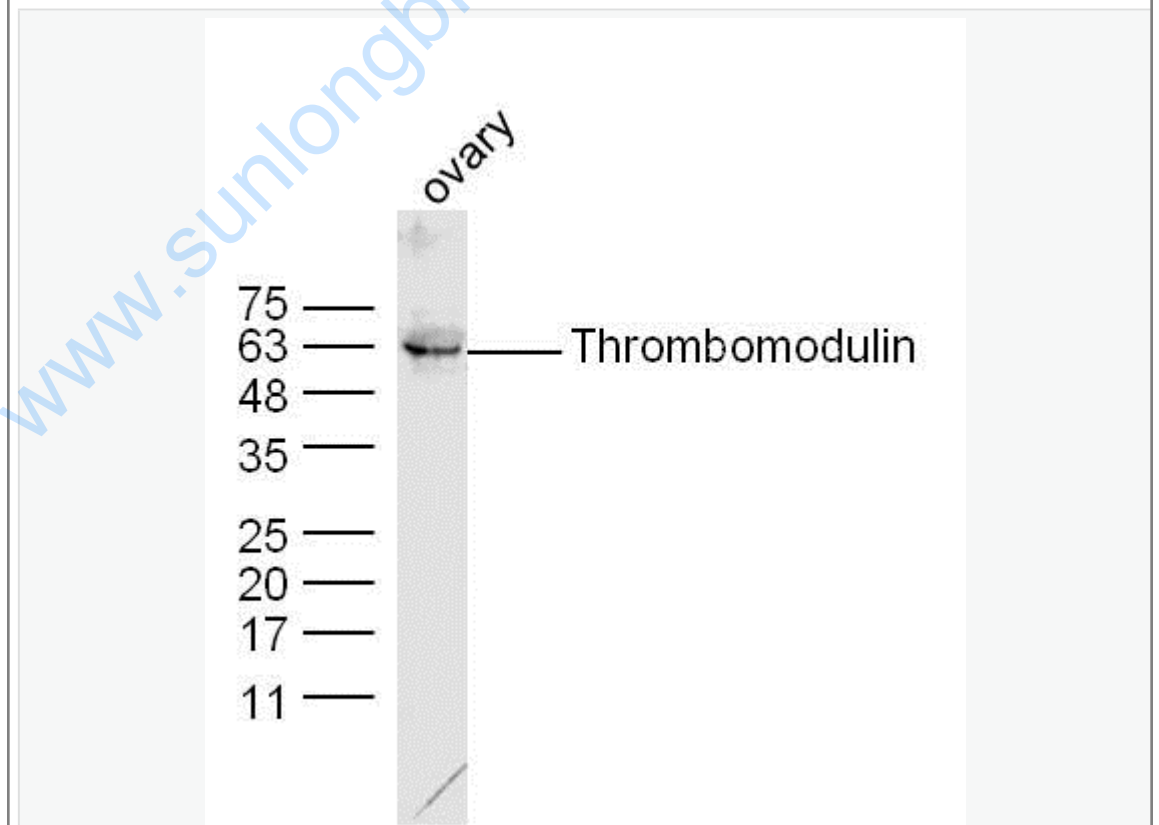
[SwissProt: P07204](#) Human

[Unigene: 2030](#) Human

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**Picture:**



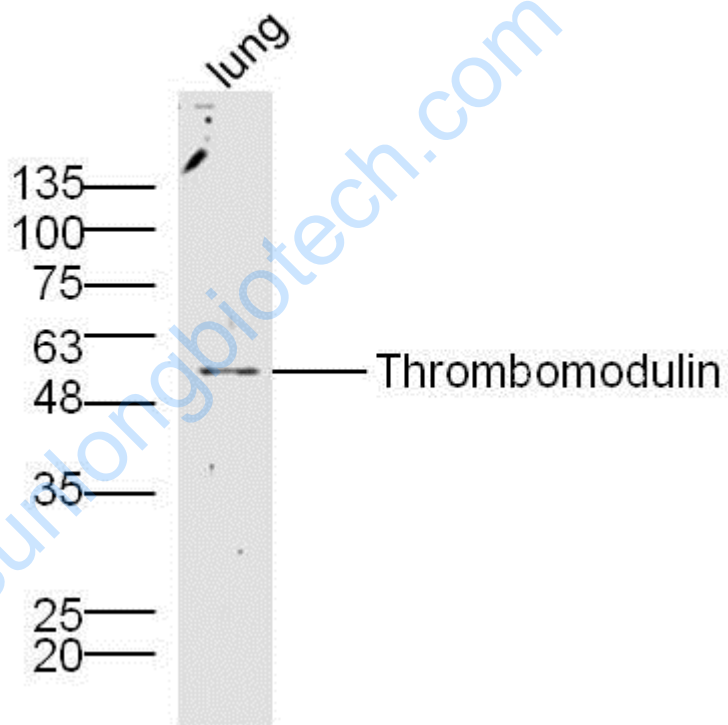
Sample: ovary (Mouse) Lysate at 40 ug

Primary: Anti-Thrombomodulin(SL10212R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 61 kD

Observed band size: 61 kD



Sample:

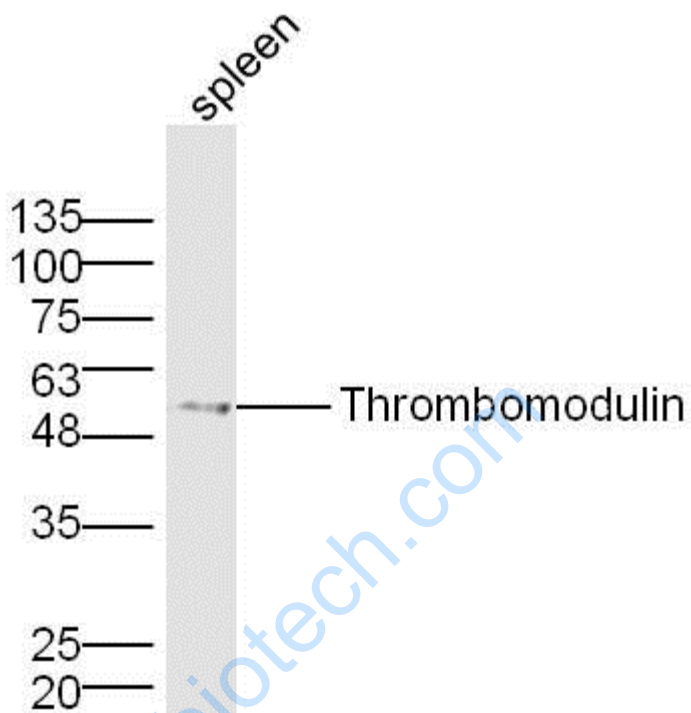
Lung (Mouse) Lysate at 40 ug

Primary: Anti- Thrombomodulin (Bs- 10212R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 61 kD

Observed band size: 61 kD



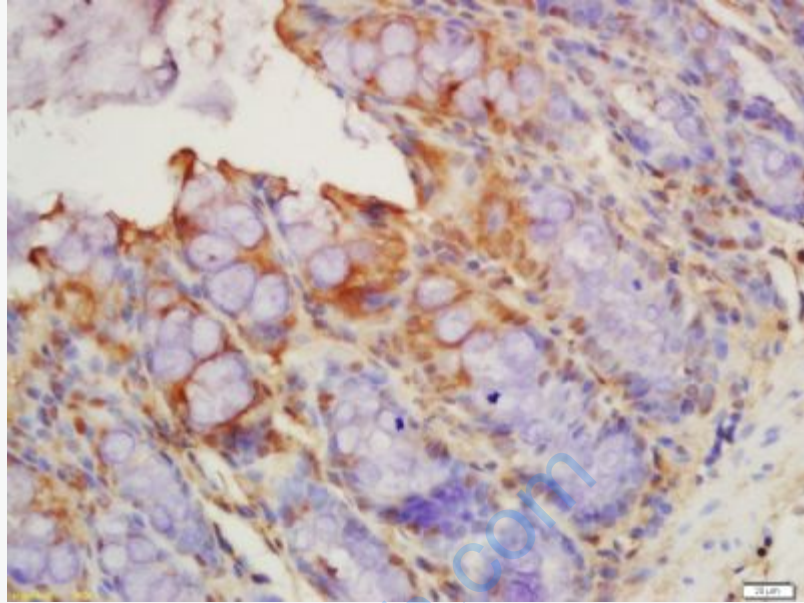
Sample: spleen (Mouse) Lysate at 40 ug

Primary: Anti-Thrombomodulin(SL10212R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 61 kD

Observed band size: 58 kD



Tissue/cell: rat colon 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°C for 20 min;  
Incubation: Anti-Thrombomodulin Polyclonal Antibody, Unconjugated(SL10212R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining