

**Recombinant Protein Technical Manual** 

Recombinant Mouse Thrombomodulin/THBD Protein (His Tag) RPES0556

## Product Data:

Product SKU: RPES055	6
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**Size:** 10µg

Species: Mouse

Expression host: Human Cells

**Uniprot:** P15306

## **Protein Information:**

Molecular Mass:	54.6 kDa
AP Molecular Mass:	85-90 kDa
Tag:	C-His
Bio-activity:	
Purity:	> 90% as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per $\mu g$ as determined by the LAL method.
Storage:	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping:	This product is provided as liquid. It is shipped at frozen temperature with blue ice. Upon receipt, store it immediately at<-20°C.
Formulation:	Supplied as a 0.2 $\mu m$ filtered solution of 20mM Tris, 150mM NaCl, pH8.0.
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	Thrombomodulin; TM; Fetomodulin; CD141; BDCA-3; Thbd

## Sequence: Leu17-Ser517

## Background:

Thrombomodulin is also known as CD141 antigen and blood dendritic cell antigen 3 (BDCA3), which is encoded by the THBD gene. The deduced amino acid sequence of mouse THBD predicts a signal peptide (aa 1 to 16) and a mature chain (aa 17 to 577) that consists of the following domains: C-type lectin, EGF-like, transmembrane and cytoplasmic. Mouse THBD is corresponding to the extracellular portion of the type I membrane protein. Predominantly synthesized by vascular endothelial cells, THBD inhibits coagulation and fibrinolysis. It functions as a cell surface receptor and an essential cofactor for active thrombin, which in turn activates protein C and thrombinactivatable fibrinolysis inhibitor (TAFI), also known as carboxypeptidase B2 (CPB2). In addition, THBD gene polymorphisims are associated with human disease and THBD plays a role in thrombosis, stroke, arteriosclerosis, and cancer.