Assosfenie 敂 Recombinant Protein Technical Manual

## Recombinant Mouse Thrombomodulin/THBD Protein (His Tag) RPES0556

## Product Data:

Product SKU: RPES0556
Species: Mouse

Size: $10 \mu \mathrm{~g}$
Expression host: Human Cells

Uniprot: P15306

## Protein Information:

Molecular Mass: $\quad 54.6$ kDa
AP Molecular Mass: 85-90 kDa
Tag: C-His
Bio-activity:
Purity: $\quad>90 \%$ as determined by reducing SDS-PAGE.
Endotoxin: $\quad<1.0 \mathrm{EU}$ per $\mu \mathrm{g}$ as determined by the LAL method.
Storage: $\quad$ Store at $<-20^{\circ} \mathrm{C}$, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping: $\quad$ This product is provided as liquid. It is shipped at frozen temperature with blue ice. Upon receipt, store it immediately at $<-20^{\circ} \mathrm{C}$.

Formulation: $\quad$ Supplied as a $0.2 \mu \mathrm{~m}$ filtered solution of 20 mM Tris, $150 \mathrm{mM} \mathrm{NaCl}, \mathrm{pH} 8.0$.
Reconstitution: Please refer to the printed manual for detailed information.
Application:
Synonyms: Thrombomodulin; TM; Fetomodulin; CD141; BDCA-3; Thbd

Immunogen Information:
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.

