

Recombinant Protein Technical Manual

Recombinant Human Thrombomodulin/CD141 Protein (His Tag) RPES4388

Product Data:

Product SKU: RPES4388 **Size:** 10μg

Species: Human Cells

Uniprot: P07204

Protein Information:

Molecular Mass: 52.9 kDa

AP Molecular Mass: 72 kDa

Tag: C-His

Bio-activity:

Purity: > 95% as determined by reducing SDS-PAGE.

Endotoxin: $< 1.0 \text{ EU per } \mu\text{g}$ 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 μm filtered solution of 20mM Tris, 150mM NaCl, pH8.0.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Thrombomodulin; THBD; TM; Fetomodulin; CD141; THRM

Immunogen Information:

Sequence: Ala19-Ser515

Background:

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). Human Thrombomodulin/THBD predicts a signal peptide and a mature chain that consists of following domains: C-type lectin, EGF-like, transmembrane and cytoplasmic. Predominantly synthesized by vascular endothelial cells, THBD inhibits coagulation and fibrinolysis. THBD gene polymorphisims are associated with human disease and THBD plays a role in thrombosis, stroke, arteriosclerosis, and cancer. For example, increased serum levels of THBD, due to protease cleavage, have been associated with smoking, cardiac surgery, atherosclerosis, liver cirrhosis, diabetes mellitus, cerebral and myocardial infarction, and multiple sclerosis.