

Human Thrombomodulin ELISA Kit | THBD elisa kit

Human Thrombomodulin Quick ELISA Kit

CATALOG #
AAA125883

REACTIVITY
Human

PRODUCT SYNONYMS

Thrombomodulin; Human Thrombomodulin Quick ELISA Kit; Thrombomodulin/BDCA-3|BDCA3; BDCA-3; CD141 antigen; CD141; Fetomodulin; THBD; THRM; TM; THBD elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	Natural and recombinant Human THBD
Assay Type	Colorimetric sandwich
Samples	cell culture supernatants, serum, plasma (heparin, EDTA, citrate) and urine
Detection Range	62.5pg/ml-4,000pg/ml
Sensitivity	<10pg/ml
Capture/Detection Antibodies	Capture antibody- polyclonal antibody from goat Detection antibody- polyclonal antibody from goat
Sample Data	Concentration(pg/ml) 0 62.5 125 250 500 1000 2000 4000 O.D. 0.021 0.074 0.103 0.171 0.365 0.665 1.155 1.854
Intra-Assay Precision	Sample 1 2 3 n 16 16 16 Mean(pg/ml) 166 420 1412 Standard deviation 7.30 26.04 87.54 CV(%) 4.4% 6.2% 6.2%
Inter-Assay Precision	Sample 1 2 3 n 24 24 24 Mean(pg/ml) 156 466 1264 Standard deviation 9.20 34.02 92.27 CV(%) 5.9% 7.3% 7.3%
Reproducibility	To assay reproducibility, three samples with differing target protein concentrations were assayed using four different lots. Lots: Lot 1 (pg/ml) Lot 2 (pg/ml) Lot 3 (pg/ml) Lot 4 (pg/ml) Mean (pg/ml) Standard Deviation CV (%) Sample 1: 166 164 170 175 169 3.71 2.2% Sample 2: 420 414 399 402 409 10.22 2.5% Sample 3: 1412 1301 1420 1458 1398 74.08 5.3% *number of samples for each test n=16.
Cross Reactivity	There is no detectable cross-reactivity with other relevant proteins.
Immunogen	Expression system for standard: NS0; Immunogen sequence: A19-S515
Anticoagulant	heparin, EDTA or citrate
Benefits	The Quick ELISA kits, assay takes less than 1.5 hours. Detect Human Thrombomodulin with <10pg/ml sensitivity. Format: 96-well plate with removable strips. This is a TMB colorimetric sandwich ELISA kit with short assay time and quick experiment set up.

Principle	<p>Human THBD Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid phase immunoassay specially designed to measure Human THBD in cell culture supernatants, serum, plasma (heparin, EDTA, citrate) and urine. It uses our proprietary Quick ELISA technology. Quick ELISA technology employs capture antibodies conjugated to an affinity tag that is recognized by the polyclonal antibody used to coat our Quick ELISA plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. The kit contains recombinant Human THBD with immunogen: Expression system for standard: NS0; Immunogen sequence: A19-S515.</p> <p>To measure Human THBD, add standards and samples to the wells, then add antibody cocktail. Wash the wells with PBS or TBS buffer, and add TMB. TMB is substrate to HRP and will be catalyzed to produce a blue color product, which changes into yellow after adding acidic stop solution. The density of the yellow product is linearly proportional to Human THBD in the sample. Read the density of the yellow product in each well using a plate reader, and benchmark the sample wells' readings against the standard curve to determine the concentration of Human THBD in the sample.</p>
Assay Procedure Step 1	4000pg/ml, 2000pg/ml,1000pg/ml, 500pg/ml, 250pg/ml, 125pg/ml, 62.5pg/ml
TMB Incubation Time	15
Preparation and Storage	Store at 4 degree C for 6 months, at -20 degree C for 12 months. Avoid multiple freeze-thaw cycles. (Shipped with wet ice.)

IMAGES



Application Data

ADDITIONAL INFORMATION

Related Product Information for THBD elisa kit	<p>Thrombomodulin(TM), CD141 or BDCA-3 is an integral membrane protein expressed on the surface of endothelial cells and serves as a cofactor for thrombin. It reduces blood coagulation by converting thrombin to an anticoagulant enzyme from a procoagulant enzyme. Thrombomodulin is also expressed on human mesothelial cell, monocyte and a dendritic cell subset. In humans, thrombomodulin is encoded by the THBD gene. The protein has a molecular mass of 74kDa, and consists of a single chain with 5 distinct domains. Thrombomodulin functions as a cofactor in the thrombin-induced activation of protein C in the anticoagulant pathway by forming a 1:1 stoichiometric complex with thrombin. This raises the speed of protein C activation thousandfold. Thrombomodulin-bound thrombin has procoagulant effect at the same time by inhibiting fibrinolysis by cleaving thrombin-activatable fibrinolysis inhibitor(TAFI, aka carboxypeptidase B2) into its active form. Thrombomodulin is a glycoprotein on the surface of endothelial cells that, in addition to binding thrombin, regulates C3b inactivation by factor I. Mutations in the thrombomodulin gene(THBD) have also been reported to be associated with atypical hemolytic-uremic syndrome(aHUS).</p>
Product Categories/Family for THBD elisa kit	ELISA kits

NCBI AND UNIPROT INFORMATION

NCBI GI #	4507483
NCBI GeneID	7056
NCBI Accession #	NP_000352.1
NCBI GenBank Nucleotide #	NM_000361.2
UniProt Accession #	P07204 ; Q8IV29 ; Q9UC32
Molecular Weight	60,329 Da
NCBI Official Full Name	thrombomodulin

NCBI Official Synonym Full Names	thrombomodulin
NCBI Official Symbol	THBD
NCBI Official Synonym Symbols	TM; THRM; AHUS6; BDCA3; CD141; THPH12
NCBI Protein Information	thrombomodulin; fetomodulin; CD141 antigen
UniProt Protein Name	Thrombomodulin
UniProt Gene Name	THBD
UniProt Synonym Gene Names	THRM; TM
UniProt Entry Name	TRBM_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/thbd-human-elisa-kits/thrombomodulin/125883>