

## Human Thrombomodulin ELISA Kit | THBD elisa kit

Human Thrombomodulin PicoKine ELISA Kit

CATALOG #  
**AAA45801**

REACTIVITY  
**Human**

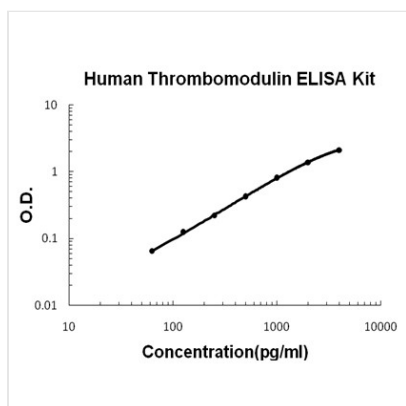
### PRODUCT SYNONYMS

Thrombomodulin; Human Thrombomodulin PicoKine ELISA Kit; thrombomodulin; CD141; CD141 antigen; Fetomodulin; Thbd; THRM; TM; TRBM\_HUMAN; THBD elisa kit

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                       |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity              | Human                                                                                                                                                 |
| Specificity             | Natural and recombinant human Thrombomodulin                                                                                                          |
| Sequence Length         | 575                                                                                                                                                   |
| Samples                 | Cell culture supernates, serum, plasma (heparin, EDTA, citrate) and urine                                                                             |
| Assay Type              | Sandwich                                                                                                                                              |
| Detection Range         | 62.5pg/ml-4000pg/ml                                                                                                                                   |
| Sensitivity             | < 10pg/ml                                                                                                                                             |
| Intra-assay Precision   | Intra-Assay Precision (Precision within an assay) Three samples of known concentration were tested on one plate to assess intra-assay precision.      |
| Inter-assay Precision   | Inter-Assay Precision (Precision between assays) Three samples of known concentration were tested in separate assays to assess inter-assay precision. |
| 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



Standard Curve (Sample)

Human Thrombomodulin PicoKine ELISA Kit standard curve

ADDITIONAL INFORMATION

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| Related Product Information for THBD elisa kit | <p><b>Principle of the assay:</b> human Thrombomodulin ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for Thrombomodulin has been precoated onto 96-well plates. Standards(NSO, A19-S515) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Thrombomodulin is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the human Thrombomodulin amount of sample captured in plate.</p> <p><b>Background:</b> 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> |
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NCBI AND UNIPROT INFORMATION

|                                  |                                            |
|----------------------------------|--------------------------------------------|
| NCBI GI #                        | 136170                                     |
| NCBI GeneID                      | 7056                                       |
| 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.