

Datasheet for KOA0554**Human Thrombomodulin ELISA Kit****Overview**

Description:	Human Thrombomodulin AccuSignal ELISA Kit - KOA0554
Item No.:	KOA0554
Size:	1 Kit
Applications:	ELISA
Reactivity:	Human
Range:	62.5 pg/ml - 4000 pg/ml

Product Details**Background:**

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).

Synonyms:	CD141, CD141 antigen, Fetomodulin, Thbd, THRM, Thrombomodulin, TM, TRBM_HUMAN
Detection Kit Type:	ELISA Kit
Detection Range:	62.5 pg/ml - 4000 pg/ml
Sensitivity:	<10 pg/ml

Target Details

Gene Name:	THBD
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Reactivity:	Human
Immunogen:	Expression system for standard: NSO; Immunogen sequence: A19-S515
Purity/Specificity:	Natural and recombinant human Thrombomodulin. There is no detectable cross-reactivity with other relevant proteins.
Relevant Links:	• UniProtKB - P07204 • NCBI - NP_000352.1 • GeneID - 7056 • KOA0554 Protocol

Application Details

Tested Applications:	ELISA
Application Note:	Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1ml per well of the 4000pg/ml, 2000pg/ml, 1000pg/ml, 500pg/ml, 250pg/ml, 125pg/ml, 62.5pg/ml human Thrombomodulin standard solutions into the precoated 96-well plate. Add 0.1ml of the sample diluent buffer into the control well (Zero well). Add 0.1ml of each properly diluted sample of human cell culture supernates, serum, plasma(heparin, EDTA, citrate) or urine to each empty well. We recommend that each human Thrombomodulin standard solution and each sample is measured in duplicate.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

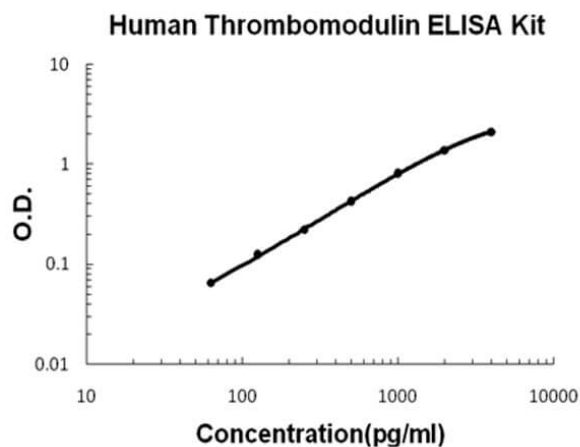
Formulation

Anticoagulant:	Heparin Sodium
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Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store vials at 4°C prior to opening. Centrifuge product if not completely clear after standing at room temperature. This product is stable for 6 months at 4°C as an undiluted liquid. Dilute only prior to immediate use. For extended storage freeze at -20°C or below for 12 months. Avoid cycles of freezing and thawing.
Expiration:	See kit insert for complete instructions.

Images



ELISA

Human Furin AccuSignal ELISA Kit standard curve. Assay Range : 62.5pg/ml-4000pg/ml. Sensitivity: <10pg/ml.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.