# abcam

## Product datasheet

## Mouse Thrombomodulin ELISA Kit ab209880

יעלשעבע SimpleStep ELISA

4 References 画像数 5

## 製品の概要

製品名 Mouse Thrombomodulin ELISA Kit

**検出方法** Colorimetric

再現性

サンプル	N	平均值	SD	CV%
mouse serum	8			2.5%

Inter-Assay(日差再現性)

Intra-Assay(同時再現性)

サンプル	N	平均値	SD	CV%
mouse serum	3			8.3%

Cell culture supernatant, Urine, Serum, Hep Plasma, EDTA Plasma, Cit plasma

サンプルの種類

添加回収試験

アッセイタイプ Sandwich (quantitative)

**検出感度** 17.5 pg/ml

**検出範囲** 93.75 pg/ml - 6000 pg/ml

**УЩ 46 Ш** 

特定サンプルでの回収試験

サンプルの種類	平均 %	測定範囲
Urine	104	98% - 115%
Serum	105	101% - 107%
Cell culture media	94	91% - 98%
Hep Plasma	92	86% - 99%
EDTA Plasma	101	97% - 103%
Cit plasma	102	93% - 115%

1

全工程の試験時間

1h 30m

ステップ

One step assay

種交差性

交差種: Mouse 非交差種: Cow

製品の概要

Mouse Thrombomodulin ELISA Kit (ab209880) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Thrombomodulin protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, serum, and urine. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse Thrombomodulin with 17.5 pg/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate (<u>ab203359</u>) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

特記事項

Mouse Thrombomodulin, which is encoded by the THBD gene, is an endothelial cell membrane protein that inhibits coagulation. Specifically, Thrombomodulin forms a 1:1 complex with thrombin, and this complex converts protein C to activated protein C. Activated protein C is an anticoagulant that inactivates coagulation factors Va and VIIIa. Human and rat Thrombomodulin show 67% and 86% amino acid sequence identity, respectively, to mouse Thrombomodulin. In humans, Thrombomodulin plays a role in thrombosis, arteriosclerosis, and cancer.

試験プラットフォーム

Microplate (12 x 8 well strips)

#### 製品の特性

#### 保存方法

Store at +4°C. Please refer to protocols.

内容	1 x 96 tests
10X Mouse Thrombomodulin Capture Antibody	1 x 600µl
10X Mouse Thrombomodulin Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 5BR	1 x 6ml
Mouse Thrombomodulin Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit

内容	1 x 96 tests
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

#### 機能

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). Once evolved, protein Ca scissions the activated cofactors of the coagulation mechanism, factor Va and factor VIIIa, and thereby reduces the amount of thrombin generated.

#### 組織特異性

 $\label{thm:equal_entropy} End other liable cells are unique in synthesizing thrombomodulin.$ 

## 関連疾患

Defects in THBD are the cause of thrombophilia due to thrombomodulin defect (THR-THBD)

[MIM:188040]. A hemostatic disorder characterized by a tendency to thrombosis.

Defects in THBD are a cause of susceptibility to hemolytic uremic syndrome atypical type 6 (AHUS6) [MIM:612926]. An atypical form of hemolytic uremic syndrome. It is a complex genetic disease characterized by microangiopathic hemolytic anemia, thrombocytopenia, renal failure and absence of episodes of enterocolitis and diarrhea. In contrast to typical hemolytic uremic syndrome, atypical forms have a poorer prognosis, with higher death rates and frequent progression to end-stage renal disease. Note=Susceptibility to the development of atypical hemolytic uremic syndrome can be conferred by mutations in various components of or regulatory factors in the complement cascade system. Other genes may play a role in modifying the

phenotype.

#### 配列類似性

Contains 1 C-type lectin domain.

Contains 6 EGF-like domains.

#### 翻訳後修飾

N-glycosylated.

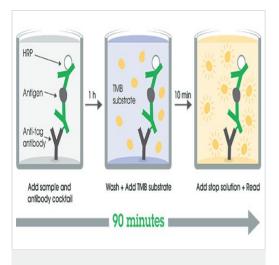
The iron and 2-oxoglutarate dependent 3-hydroxylation of aspartate and asparagine is (R)

stereospecific within EGF domains.

#### 細胞内局在

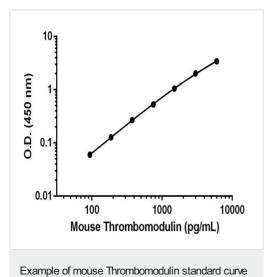
Membrane.

## 画像

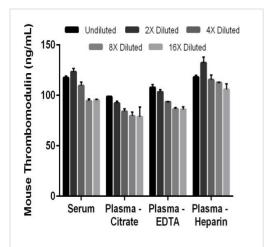


Other - Mouse Thrombomodulin ELISA Kit (ab209880)

SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.

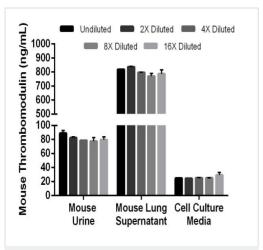


Background-subtracted data values (mean +/- SD) are graphed.



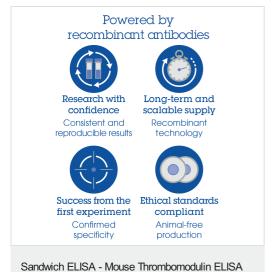
Interpolated concentrations of native
Thrombomodulin in mouse serum, plasma (citrate),
plasma (EDTA), and plasma (heparin)

The concentrations of Thrombomodulin were measured in duplicates, interpolated from the Thrombomodulin standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 5%, plasma (citrate) 5%, plasma (EDTA) 5%, and plasma (heparin) 5%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Thrombomodulin concentration was determined to be 111.2 ng/mL in serum, 88.6 ng/mL in plasma (citrate), 95.4 ng/mL in plasma (EDTA), and 119.6 ng/mL in plasma (heparin).



Interpolated concentrations of native
Thrombomodulin in mouse urine and mouse lung
supernatant samples and spiked Thrombomodulin in
cell culture media

The concentrations of Thrombomodulin were measured in duplicates, interpolated from the Thrombomodulin standard curves and corrected for sample dilution. Undiluted samples are as follows: urine 5%, mouse lung supernatant 1:150, and cell culture media 10%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Thrombomodulin concentration was determined to be 81.9 ng/mL in urine, 805.5 ng/mL in lung supernatant and 25.8 ng/mL in cell culture media. Mouse lung supernatant was cultured for 6 days in cell culture media plus 10% Fetal Bovine Serum and 5  $\mu$ g/mL LPS.



Kit (ab209880)

To learn more about the advantages of recombinant antibodies see **here**.

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