

CD141/Thrombomodulin Recombinant antibody

Catalog Number: 83416-4-RR

Basic Information

Catalog Number:

83416-4-RR

Size:

1000 ug/ml

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

NM_000361.3

GeneID (NCBI):

7056

UNIPROT ID:

P07204

Full Name:

thrombomodulin

Calculated MW:

60 kDa

Observed MW:

100-105 kDa

Purification Method:

Protein A purification

CloneNo.:

240365D1

Recommended Dilutions:

WB 1:5000-1:50000

IHC 1:500-1:2000

IF/ICC 1:125-1:500

Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Species Specificity:

human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : THP-1 cells, A431 cells

IHC : human lung tissue, human cervical squamous cancer tissue, human lung squamous cell carcinoma tissue, human placenta tissue

IF/ICC : A431 cells,

Background Information

Thrombomodulin, also known as CD141, is an endothelial cell surface glycoprotein that forms a 1:1 complex with the coagulation factor thrombin and plays an important role as a natural anticoagulant. Thrombomodulin serves to convert thrombin from a procoagulant protein into the activator for protein C. Once converted to activated protein C (APC), this protein serves as a major anticoagulant in blood (PMID: 2827310). Thrombomodulin is also located in other cells (keratinocytes, osteoblasts, macrophages,...) where it might be involved in cell differentiation or in inflammation (PMID: 9814688). In humans, thrombomodulin is encoded by the THBD gene. Mutations in this gene are a cause of thromboembolic disease, also known as inherited thrombophilia. Thrombomodulin is glycosylated and has an apparent molecular weight of 75 to 110 kDa (PMID: 1650405; 2827310).

Storage

Storage:

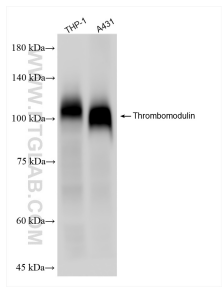
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

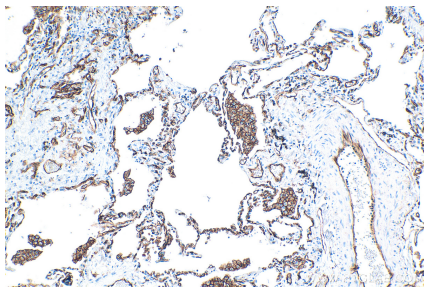
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

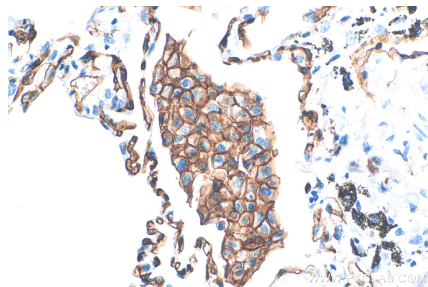
Selected Validation Data



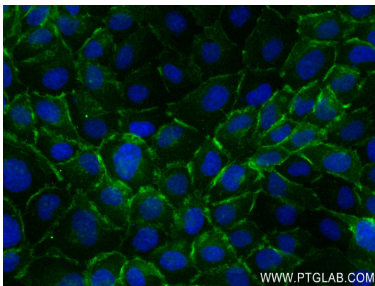
Various lysates were subjected to SDS PAGE followed by western blot with 83416-4-RR (Thrombomodulin antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human lung tissue slide using 83416-4-RR (Thrombomodulin antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



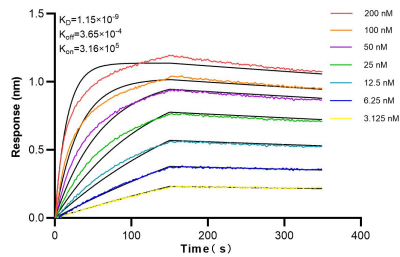
Immunohistochemical analysis of paraffin-embedded human lung tissue slide using 83416-4-RR (Thrombomodulin antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed A431 cells using Thrombomodulin antibody (83416-4-RR, Clone: 240365D1) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 83416-4-RR (CD141/Thrombomodulin antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 83416-4-RR against Human CD141/Thrombomodulin were performed. The affinity constant is 1.15 nM.