For Research Use Only

CD141/Thrombomodulin Recombinant antibody

Catalog Number:83416-4-RR



Basic Information

Catalog Number: GenBank Accession Number:

83416-4-RR NM 000361.3 GeneID (NCBI):

100ul, Concentration: 1000 ug/ml by 7056 Nanodrop: **UNIPROT ID:** Source: P07204 Rabbit Full Name: Isotype: thrombomodulin IgG Calculated MW:

60 kDa Observed MW: 100-105 kDa

Purification Method:

Protein A purfication 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 $other cells \ (keratinocytes, osteoblasts, macrophages, \dots) \ where \ it \ might be \ involved \ in \ cell \ differentiation \ or \ in \ nor \ nor$ 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:

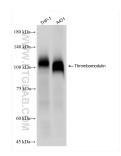
Store at -20°C. Stable for one year after shipment. Storage Buffer:

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

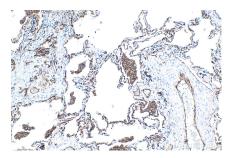
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

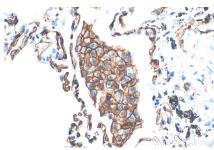
Selected Validation Data



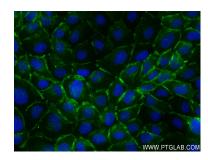
Various lysates were subjected to SDS PAGE followed by western blot with 83416-4-RR (Thrombomodulin antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



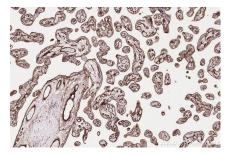
Immunohistochemical analysis of paraffinembedded human lung tissue slide using 83416-4-RR (Thrombomodulin antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



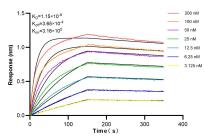
Immunohistochemical analysis of paraffinembedded human lung tissue slide using 83416-4-RR (Thrombomodulin antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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