## For Research Use Only

# CD147 Polyclonal antibody

Catalog Number: 11989-1-AP

30 Publications



**Basic Information** 

Catalog Number: 11989-1-AP

 Size:
 GeneID (NCBI):

 500 μ g/ml
 682

Source: UNIPROT ID: Rabbit P35613
Isotype: Full Name:

IgG basigin (Ok blood group)

Immunogen Catalog Number: Calculated MW: 385 aa, 42 kDa
Observed MW:

42-50 kDa

BC009040

GenBank Accession Number:

Purification Method:
Antigen affinity purification
Recommended Dilutions:

WB 1:1000-1:4000 IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:50-1:500

# Applications

Tested Applications:
WB,IP,IHC,ELISA
Cited Applications:
WB,IP,IHC,IF,CoIP
Species Specificity:
human, mouse
Cited Species:
human, rat, mouse

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: human liver tissue, Jurkat cells, mouse liver tissue. mouse heart tissue

IP: HEK-293 cells,

IHC: human lung cancer tissue, human liver cancer tissue, human breast cancer tissue, human gliomas tissue

# Background Information

CD147, also known as Basigin or extracellular matrix metalloproteinase inducer (EMMPRIN), is a transmembrane glycoprotein that belongs to the immunoglobulin superfamily (PMID: 7812975). The molecule is composed of an intracellular portion and an extracellular portion and a single transmembrane region. CD147 is expressed on a variety of cell types (e.g., hematopoietic, epithelial, and endothelial cells) and at varying levels (PMID: 32968061). Increased expression of CD147 occurs in many tumors. CD147 is a pleiotropic molecule that plays an important role in fetal, neuronal, lymphocyte and extracellular matrix development (PMID: 17945211). CD147 has been identified as a receptor essential for erythrocyte invasion by Plasmodium falciparum (PMID: 22080952). It has been reported that spike protein of SARS-CoV-2 binds to CD147 on host cells, thereby mediating the viral invasion (Wang, Ke, et al, BioRxiv, 2020). The CD147 gene, designated BSG for basigin, is located on chromosome 19p13.3. Four transcript variants encoding different isoforms have been found (PMID: 21536654). CD147 migrates on SDS-PAGE usually between 35 and 65 kDa, depending on the degree of glycosylation (PMID: 17945211).

### **Notable Publications**

Author	Pubmed ID	Journal	Application
Linda Sooman	25263081	Acta Oncol	IHC
Lingling Gao	35003362	J Cancer	WB,IHC,CoIP
Tao Wang	28985237	PLoS Pathog	WB

# Storage

Storage

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

Storage Buffer:

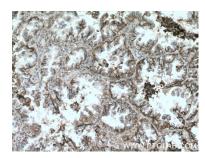
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

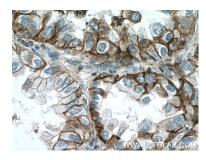
# **Selected Validation Data**



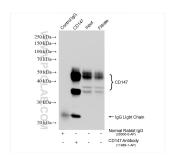
human liver tissue were subjected to SDS PAGE followed by western blot with 11989-1-AP (CD147 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 11989-1-AP (CD147 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 11989-1-AP (CD147 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-CD147 (IP:11989-1-AP, 4ug; Detection:11989-1-AP 1:10000) with HEK-293 cells lysate 1200 ug.