

CD147 Monoclonal antibody

Catalog Number: 66443-1-Ig

Featured Product

9 Publications

Basic Information

Catalog Number:

66443-1-Ig

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG2619

GenBank Accession Number:

BC009040

GeneID (NCBI):

682

UNIPROT ID:

P35613

Full Name:

basigin (Ok blood group)

Calculated MW:

385 aa, 42 kDa

Observed MW:

45-50 kDa

Purification Method:

Protein G purification

CloneNo.:

1G12B5

Recommended Dilutions:

WB: 1:5000-1:50000

IHC: 1:50-1:500

IF-P: 1:400-1:1600

IF/ICC: 1:400-1:1600

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, ELISA

Cited Applications:

WB, IF, IP

Species Specificity:

human, pig

Cited Species:

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: TF-1 cells, human spleen tissue, Jurkat cells, PNGF treated TF-1 cells, MOLT-4 cell

IHC: human liver cancer tissue, human placenta tissue, human tonsillitis tissue

IF-P: human tonsillitis tissue,

IF/ICC: A431 cells, HeLa cells

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, 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
Hui Lu	33755768	Anal Bioanal Chem	WB
Fei Liu	32739525	Biochim Biophys Acta Mol Cell Res	WB
Mathilde Mathieu	34282141	Nat Commun	WB

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

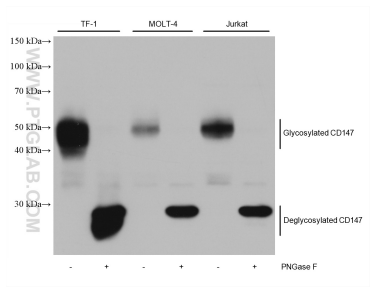
For technical support and original validation data for this product please contact:

T: 4006900926

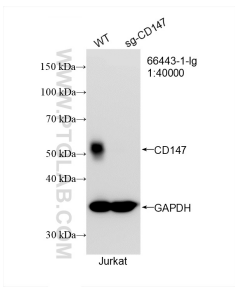
E: Proteintech-CN@ptglab.comW: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

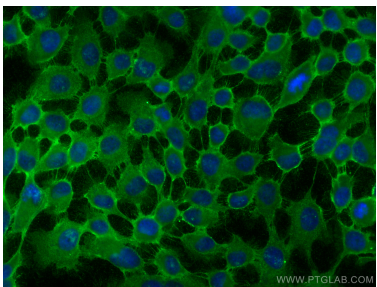
Selected Validation Data



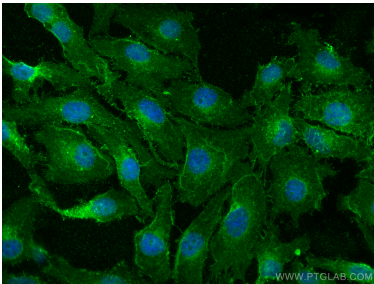
Untreated and PNGase F-treated lysates of TF-1 cells, MOLT-4 cells, Jurkat cells were subjected to SDS PAGE followed by western blot with 66443-1-Ig (CD147 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



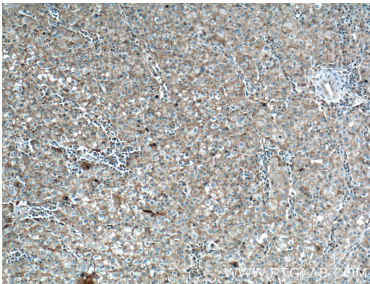
WB result of CD147 antibody (66443-1-Ig; 1:40000; room temperature for 1.5 hours) with wild-type and CD147 knockout Jurkat cells.



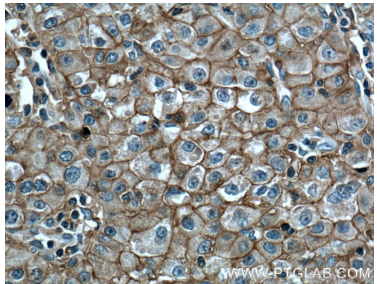
Immunofluorescent analysis of (-20°C Methanol) fixed A431 cells using CD147 antibody (66443-1-Ig, Clone: 1G12B5) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



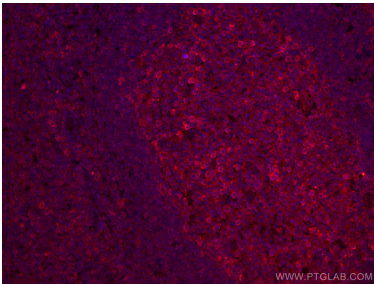
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CD147 antibody (66443-1-Ig, Clone: 1G12B5) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



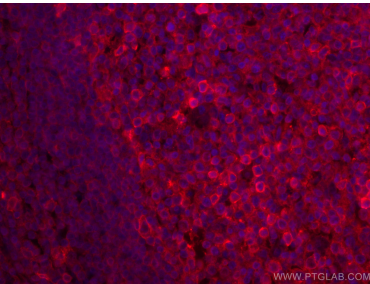
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66443-1-Ig (CD147 antibody) at dilution of 1:500 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66443-1-Ig (CD147 antibody) at dilution of 1:500 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed human tonsillitis tissue using CD147 antibody (66443-1-Ig, Clone: 1G12B5) at dilution of 1:800 and CoraLite®594-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed human tonsillitis tissue using CD147 antibody (66443-1-Ig, Clone: 1G12B5) at dilution of 1:800 and CoraLite®594-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).