

For Research Use Only

# CD147 Monoclonal antibody

Catalog Number: 66443-1-Ig

Featured Product

6 Publications



## Basic Information

<b>Catalog Number:</b> 66443-1-Ig	<b>GenBank Accession Number:</b> BC009040	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul, Concentration: 1902 µg/ml by Nanodrop and 1000 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 682	<b>CloneNo.:</b> 1G12B5
<b>Source:</b> Mouse	<b>Full Name:</b> basigin (Ok blood group)	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:50-1:500 IF 1:400-1:1600
<b>Isotype:</b> IgG1	<b>Calculated MW:</b> 385 aa, 42 kDa	
<b>Immunogen Catalog Number:</b> AG2619	<b>Observed MW:</b> 45-50 kDa	

## Applications

**Tested Applications:**  
FC, IF, IHC, WB, ELISA

**Cited Applications:**  
IP, WB

**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, MOLT-4 cell, Jurkat cells

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

**IF:** human tonsillitis 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
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 pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

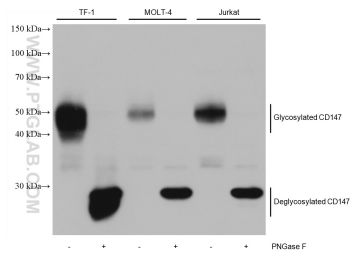
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

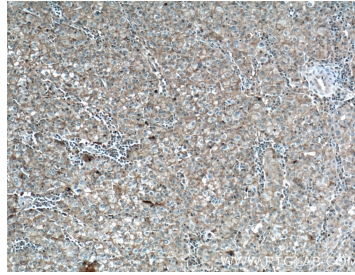
E: proteintech@ptglab.com  
W: ptglab.com

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

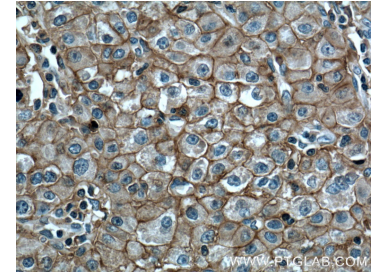
## Selected Validation Data



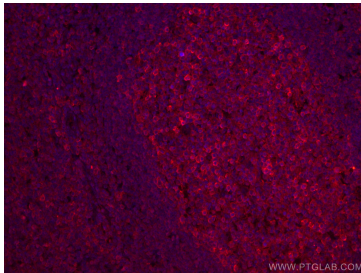
Untreated and PNGase F-treated lysates of TF-1 cells, MOLT-4 cells, Jurkat cells were subjected to SDS PAGE followed by western blot with 66443-1-Ig (CD147 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



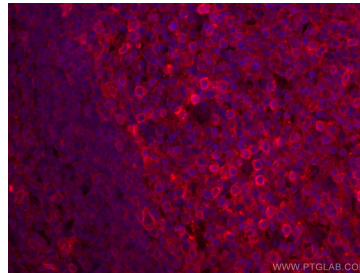
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66443-1-Ig (CD147 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



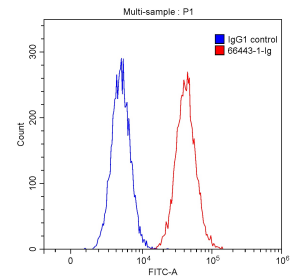
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66443-1-Ig (CD147 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



$1 \times 10^6$  Jurkat cells were stained with 0.20 ug Anti-Human CD147 (66443-1-Ig, Clone:1G12B5) (red) or 0.20 ug Mouse IgG1 Isotype Control (66360-1-Ig, Clone:T1F8D3F10) (blue) and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) with dilution 1:1000. Cells were fixed with 90% MeOH.