

For Research Use Only

# CD147 Monoclonal antibody, PBS Only (Detector)



Catalog Number: 66443-1-PBS

Featured Product

## Basic Information

|  |   |   |
|--|---|---|
| <b>Catalog Number:</b><br>66443-1-PBS                      | <b>GenBank Accession Number:</b><br>BC009040  | <b>Purification Method:</b><br>Protein A purification |
| <b>Size:</b><br>100ug , Concentration: 1mg/ml by Nanodrop; | <b>GeneID (NCBI):</b><br>682                  | <b>CloneNo.:</b><br>1G12B5                            |
| <b>Source:</b><br>Mouse                                    | <b>UNIPROT ID:</b><br>P35613                  |   |
| <b>Isotype:</b><br>IgG1                                    | <b>Full Name:</b><br>basigin (Ok blood group) |   |
| <b>Immunogen Catalog Number:</b><br>AG2619                 | <b>Calculated MW:</b><br>385 aa, 42 kDa       |   |
|  | <b>Observed MW:</b><br>45-50 kDa              |   |

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, IF-P, Cytometric bead array, Indirect ELISA

**Species Specificity:**  
human, pig

## Product Information

66443-1-PBS targets CD147 as part of a matched antibody pair:

MP50494-1: 66443-2-PBS capture and 66443-1-PBS detection (validated in Cytometric bead array)

Unconjugated mouse monoclonal antibody pair in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## 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).

## Storage

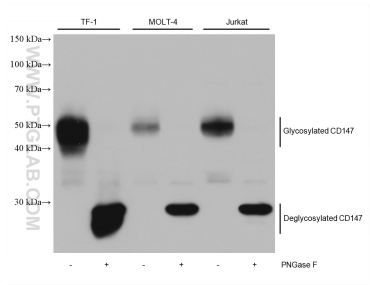
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS only, pH7.3

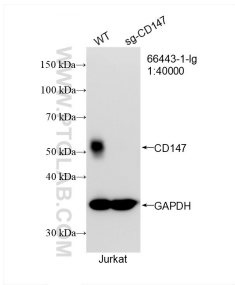
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

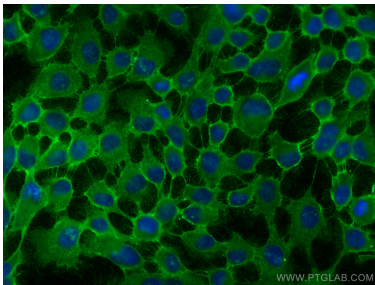
Selected Validation Data



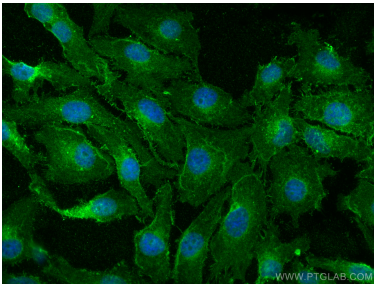
Untreated and PNGase F-treated lysates of TF-1 cells, MOLT-4 cells, Jurkat cells were subjected to SDS PAGE followed by western blot with 66443-1-Ig (CD147 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66443-1-PBS in a different storage buffer formulation.



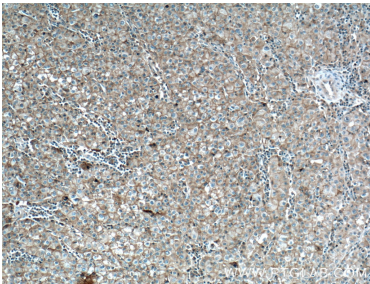
WB result of CD147 antibody (66443-1-Ig; 1:40000; room temperature for 1.5 hours) with wild-type and CD147 knockout Jurkat cells. This data was developed using the same antibody clone with 66443-1-PBS in a different storage buffer formulation.



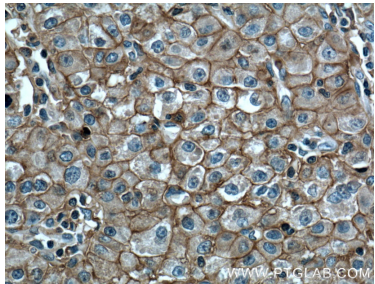
Immunofluorescent analysis of (-20°C Methanol) fixed A431 cells using CD147 antibody (66443-1-Ig, Clone: 1G12B5 ) at dilution of 1:800 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66443-1-PBS in a different storage buffer formulation.



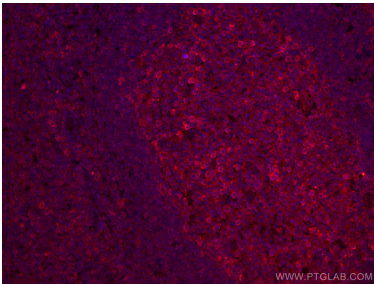
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CD147 antibody (66443-1-Ig, Clone: 1G12B5 ) at dilution of 1:800 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66443-1-PBS in a different storage buffer formulation.



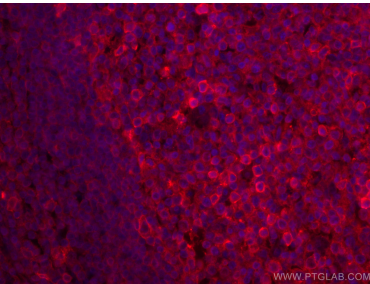
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66443-1-Ig (CD147 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66443-1-PBS in a different storage buffer formulation.



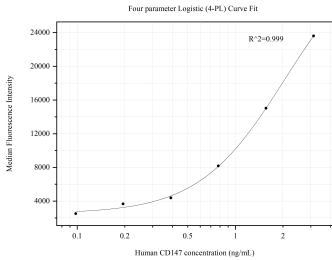
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66443-1-Ig (CD147 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66443-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 66443-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 66443-1-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP50494-1, CD147 Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 66443-2-PBS. Detection antibody: 66443-1-PBS. Standard:Ag2619. Range: 0.098-3.125 ng/mL.