For Research Use Only

CD147 Monoclonal antibody, PBS Only (Detector)



Purification Method:

CloneNo.:

1G12B5

Protein A purification

Catalog Number: 66443-1-PBS

Featured Product

Basic Information

Catalog Number: 66443-1-PBS

Concentration:

1mg/ml

Source: Mouse Isotype:

lgG1 basigin (Ok blood group)

Calculated MW: Immunogen Catalog Number: AG2619

385 aa, 42 kDa

Observed MW: 45-50 kDa

BC009040

GeneID (NCBI):

UNIPROT ID:

Full Name:

P35613

GenBank Accession Number:

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, Cytometric bead array, Indirect

Species Specificity:

human, pig

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:

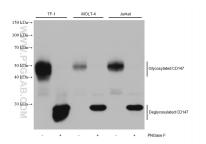
Store at -80°C

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

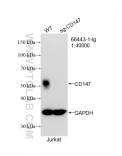
Storage Buffer:

PBS only, pH7.3

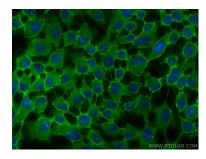
Selected Validation Data



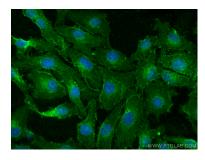
Untreated and PNGase F-treated lysates of TF-1 cells, MOLT-4 cells, Jurkat cells were subjected to SDS PAGE followed by western blot with 66443-1-Ig (CD147 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66443-1-PBS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



WB result of CD147 antibody (66443-1-lg; 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.



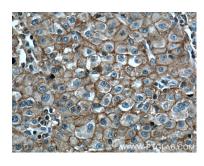
Immunofluorescent analysis of (-20°C Methanol) fixed A431 cells using CD147 antibody (66443-1-lg, Clone: 1G12B5) at dilution of 1:800 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgC(H+L). This data was developed using the same antibody clone with 66443-1-PBS in a different storage buffer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



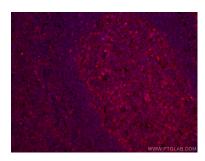
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CD147 antibody (66443-1-Ig, Clone: 1G12B5) at dilution of 1:800 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66443-1-PBS in a different storage buffer formulation.



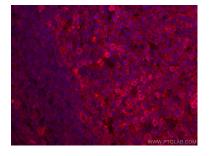
Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 66443-1-lg (CD147 antibody) at dilution of 1:500 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66443-1-PBS in a different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



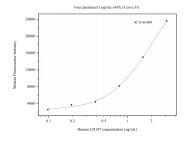
Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 66443-1-lg (CD147 antibody) at dilution of 1:500 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66443-1-PBS in a different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



Immunofluorescent analysis of (4% PFA) fixed human tonsillitis tissue using CD147 antibody (66443-1-lg, 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-lg, 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