

For Research Use Only

Integrin beta-5 Recombinant antibody, PBS Only (Capture/Detector)

Catalog Number: 83514-3-PBS



Basic Information

Catalog Number:

83514-3-PBS

Size:

1 mg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG29783

GenBank Accession Number:

BC006541

GeneID (NCBI):

3693

UNIPROT ID:

P18084

Full Name:

integrin, beta 5

Calculated MW:

88 kDa

Observed MW:

88-100 kDa

Purification Method:

Protein A purification

CloneNo.:

240401G11

Applications

Tested Applications:

WB, IHC, FC (Intra), Cytometric bead array, Sandwich
ELISA, Indirect ELISA, Sample test

Species Specificity:

human

Background Information

ITGB5, also known as Integrin beta-5. It is expected to be located in the plasma membrane and mitochondria, which is ubiquitinated in placenta and gall bladder. ITGB5 is a member of integrins and was proved to be associated with pathological processes in several tumors (PMID: 34966851). It is reported that ITGB5 is highly expressed in hepatocellular carcinoma (HCC), and miR-185 regulates the expression of β -catenin through the ITGB5-dependent manner and affects the proliferation and migration of HCC cells (PMID: 35223869). The molecular weight of ITGB5 is 88 kDa, and the glycosylation modification also exists.

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

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

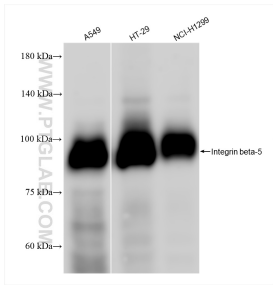
T: 4006900926

E: Proteintech-CN@ptglab.com

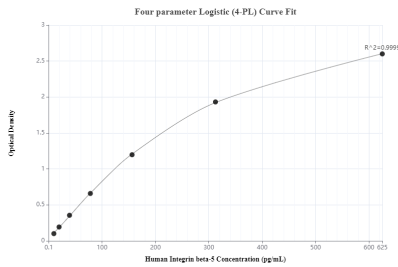
W: ptgcn.com

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

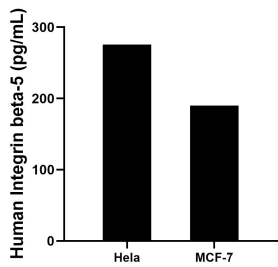
Selected Validation Data



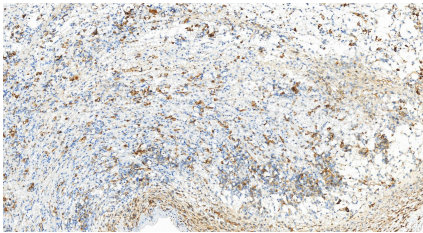
Various lysates were subjected to SDS PAGE followed by western blot with 83514-3-RR (Integrin beta-5 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83514-3-PBS in a different storage buffer formulation.



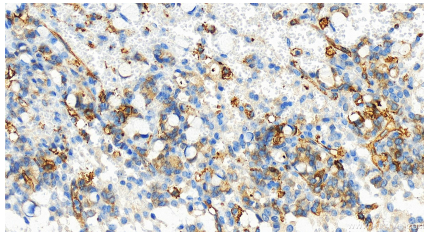
Sandwich ELISA standard curve of MP00512-4, Integrin Beta 5 Recombinant Matched Antibody Pair - PBS only. 83514-3-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag29783.83514-1-PBS was HRP conjugated as the detection antibody. Range: 9.766-625 pg/mL.



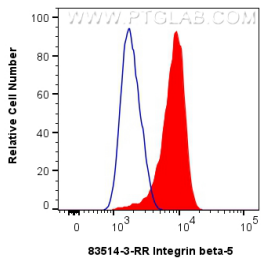
The mean Integrin Beta 5 concentration was determined to be 275.71 pg/mL in HeLa cell extract based on a 2.8 mg/mL extract load and 190.06 pg/mL in MCF-7 cell extract based on a 3.1 mg/mL extract load.



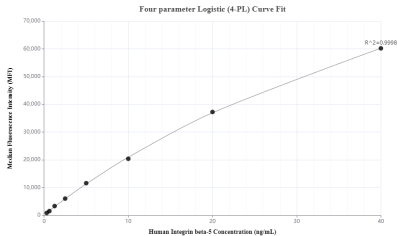
Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 83514-3-RR (Integrin beta-5 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83514-3-PBS in a different storage buffer formulation.



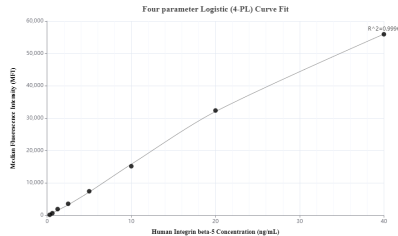
Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 83514-3-RR (Integrin beta-5 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83514-3-PBS in a different storage buffer formulation.



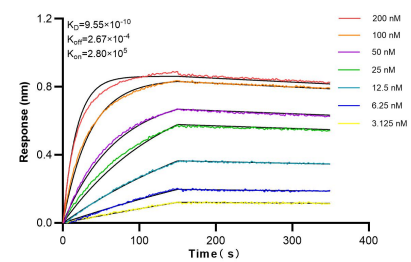
1x10⁶ HeLa cells were intracellularly stained with 0.25 ug Integrin beta-5 Recombinant antibody (83514-3-RR, Clone:240401G11) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-O-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 83514-3-PBS in a



Cytometric bead array standard curve of MP00512-1, Integrin Beta 5 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83514-2-PBS. Detection antibody: 83514-3-PBS. Standard: Ag29783. Range: 0.313-40 ng/mL



Cytometric bead array standard curve of MP00512-2, Integrin Beta 5 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83514-5-PBS. Detection antibody: 83514-3-PBS. Standard: Ag29783. Range: 0.313-40 ng/mL



Bilayer interferometry (BLI) kinetic assays of 83514-3-RR against Human Integrin beta-5 were performed. The affinity constant is 0.955 nM.