Anti-Integrin beta 5 Antibody [PSH11-53]

HA723345

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	IF-Cell, FC
Molecular Wt:	Predicted band size: 88 kDa
Clone number:	PSH11-53

Description: Integrin beta-5 is a protein that in humans is encoded by the ITGB5 gene. Integrin, beta 5 has been shown to interact with PTK2, Annexin A5 and PAK4. ITGB5 encodes a subunit of integrin that can interact with several alpha chains to form a variety of integrin heterodimers. It also plays a potential role in intercellular communication during tumor progression and metastasis.

Immunogen: Recombinant protein within human Integrin beta 5 aa 1-719.

Positive control: PANC-1, A549.

Subcellular location: Cell membrane.

Database links: SwissProt: P18084 Human

Recommended Dilutions:

IF-Cell	1:100-1:500
FC	1:1,000

Storage Buffer: 1*PBS (pH7.4), 0.1% BSA, 40% Glycerol, 0.2% Proclean 950.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

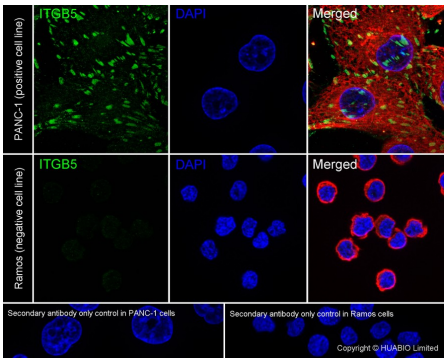

Fig1: Immunocytochemistry analysis of PANC-1 (positive) and Ramos (negative) labeling Integrin beta 5 with Rabbit anti-Integrin beta 5 antibody (HA723345) at 1/500 dilution.

Cells were fixed in 4% paraformaldehyde for 15 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 15 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-Integrin beta 5 antibody (HA723345) at 1/500 dilution in 1% BSA in PBST overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (HA601187, red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

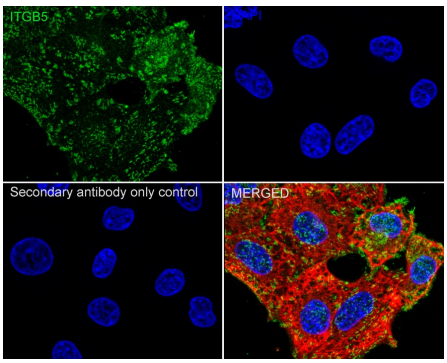

Fig2: Immunocytochemistry analysis of A549 cells labeling Integrin beta 5 with Rabbit anti-Integrin beta 5 antibody (HA723345) at 1/100 dilution.

Cells were fixed in 4% paraformaldehyde for 15 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 15 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-Integrin beta 5 antibody (HA723345) at 1/100 dilution in 1% BSA in PBST overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (HA601187, red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

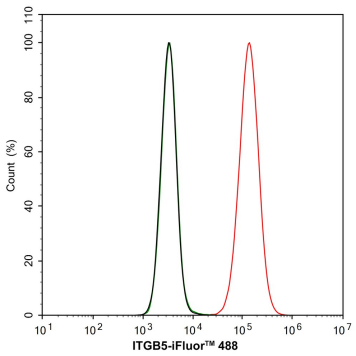

Fig3: Flow cytometric analysis of A549 cells labeling Integrin beta 5.

Cells were washed twice with cold PBS and resuspend. Then stained with the primary antibody (HA723345, 1/1,000) (red) compared with Rabbit IgG Isotype Control (green). After incubation of the primary antibody at +4℃ for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4℃. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

Background References

1. Lei T et al. ITGB5 facilitates gastric cancer metastasis by promoting TGFBR2 endosomal recycling. Cancer Lett. 2024 Jun
2. Wen X et al. ITGB5 promotes innate radiation resistance in pancreatic adenocarcinoma by promoting DNA damage repair and the MEK/ERK signaling pathway. Front Oncol. 2022 Sep