

Anti-Integrin beta 4 ITGB4 Rabbit Monoclonal Antibody

Catalog # ABO14215

Product Information

Application	WB, IHC
Primary Accession	P16144
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-Integrin beta 4 ITGB4 Rabbit Monoclonal Antibody . Tested in WB, IHC applications. This antibody reacts with Human, Mouse.

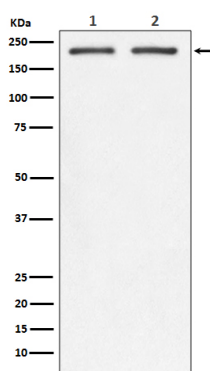
Additional Information

Gene ID	3691
Other Names	Integrin beta-4, GP150, CD104, ITGB4
Calculated MW	202167
Application Details	WB 1:500-1:2000 IHC 1:50-1:200
Subcellular Localization	Cell membrane; Single-pass type I membrane protein. Cell membrane; Lipid-anchor. Cell junction, hemidesmosome. Colocalizes with DST at the leading edge of migrating keratinocytes.
Tissue Specificity	Integrin alpha-6/beta-4 is predominantly expressed by epithelia. Isoform beta-4D is also expressed in colon and placenta. Isoform beta-4E is also expressed in epidermis, lung, duodenum, heart, spleen and stomach.
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: AAFE-9
Immunogen	A synthesized peptide derived from human Integrin beta 4
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

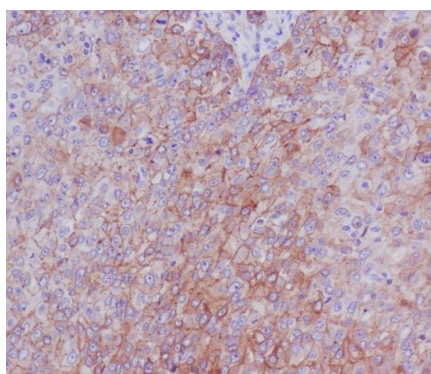
Protein Information

Name	ITGB4
Function	Integrin alpha-6/beta-4 is a receptor for laminin. Plays a critical structural role in the hemidesmosome of epithelial cells. Is required for the regulation of keratinocyte polarity and motility. ITGA6:ITGB4 binds to NRG1 (via EGF domain) and this binding is essential for NRG1-ERBB signaling (PubMed: 20682778). ITGA6:ITGB4 binds to IGF1 and this binding is essential for IGF1 signaling (PubMed: 22351760). ITGA6:ITGB4 binds to IGF2 and this binding is essential for IGF2 signaling (PubMed: 28873464).
Cellular Location	Cell membrane; Single-pass type I membrane protein. Cell membrane; Lipid-anchor. Cell junction, hemidesmosome. Note=Colocalizes with DST at the leading edge of migrating keratinocytes
Tissue Location	Integrin alpha-6/beta-4 is predominantly expressed by epithelia. Isoform beta-4D is also expressed in colon and placenta Isoform beta-4E is also expressed in epidermis, lung, duodenum, heart, spleen and stomach

Images



Western blot analysis of Integrin beta 4 expression in (1) SW480 cell lysate; (2) Mouse spleen lysate.



Immunohistochemical analysis of paraffin-embedded human breast cancer, using Integrin beta 4 Antibody.

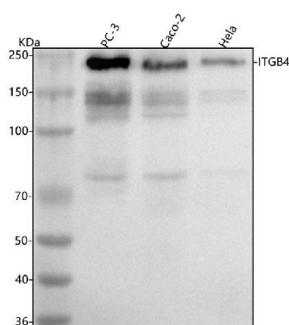


Figure 1. Western blot analysis of ITGB4 using anti-ITGB4 antibody (M01015).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human PC-3 whole cell lysates,

Lane 2: human Caco-2 whole cell lysates,

Lane 3: human HeLa whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes.

Blocked the membrane with 5% non-fat milk/TBS for 1.5

hour at RT. The membrane was incubated with rabbit anti-ITGB4 antigen affinity purified monoclonal antibody (Catalog # M01015) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for ITGB4 at approximately 240 kDa. The expected band size for ITGB4 is at 202 kDa.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.