

Anti-Integrin Beta 4 Antibody
Catalog # ABO11013**Specification**

Anti-Integrin Beta 4 Antibody - Product Information

Application	WB
Primary Accession	P16144
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Integrin beta-4(ITGB4) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Integrin Beta 4 Antibody - Additional Information

Gene ID 3691

Other Names

Integrin beta-4, GP150, CD104, ITGB4

Calculated MW

202167 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

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.

Protein Name

Integrin beta-4

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human Integrin beta 4(1810-1822aa TLSTHMDQQFFQT), different from the related mouse and rat sequences by one

amino acid.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the integrin beta chain family.

Anti-Integrin Beta 4 Antibody - 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](http://www.uniprot.org/citations/20682778)). ITGA6:ITGB4 binds to IGF1 and this binding is essential for IGF1 signaling (PubMed: [22351760](http://www.uniprot.org/citations/22351760)). ITGA6:ITGB4 binds to IGF2 and this binding is essential for IGF2 signaling (PubMed: [28873464](http://www.uniprot.org/citations/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

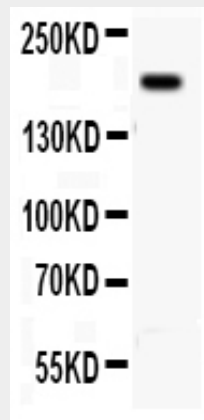
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Anti-Integrin Beta 4 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Integrin Beta 4 Antibody - Images



Anti- ITGB4 antibody, ABO11013, Western blottingAll lanes: Anti ITGB4 (ABO11013) at 0.5ug/mlWB: A431 Whole Cell Lysate at 40ugPredicted bind size: 200KDObserved bind size: 200KD

Anti-Integrin Beta 4 Antibody - Background

ITGB4(Integrin, beta-4), also known as CD104(Cluster of Differentiation 104), is a human gene. The gene encodes the integrin beta 4 subunits, a receptor for the laminins. This subunit tends to associate with alpha 6 subunits and is likely to play a pivotal role in the biology of invasive carcinoma. The ITGB4 gene is mapped on 17q25.1. Using expression profiling, Yang et al. found that ITGB4 was upregulated 6-fold by ZKSCAN3 in transfected human colon cancer cells compared with parental cells. They confirmed that ZKSCAN3 bound the promoter of ITGB4 in vitro and in vivo. ITGB4 knockdown by short hairpin RNA countered ZKSCAN3-augmented anchorage-independent colony formation in the colon cancer cell lines. The integrin beta-4 subunit is characterized by an unusually long cytoplasmic domain that harbors 4 fibronectin type III(FNIII) repeats, residing in 2 pairs separated by a connecting segment. Vidal et al. found compound heterozygosity for mutations in the ITGB4 gene in an infant with junctional epidermolysis bullosa associated with pyloric atresia.