

Anti-Integrin Beta 4 Picoband Antibody
Catalog # ABO11732**Specification**

Anti-Integrin Beta 4 Picoband Antibody - Product Information

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

Description

Rabbit IgG polyclonal antibody for Integrin beta-4(ITGB4) detection. Tested with WB, IHC-P in Human.

Reconstitution

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

Anti-Integrin Beta 4 Picoband Antibody - Additional Information

Gene ID 3691

Other Names

Integrin beta-4, GP150, CD104, ITGB4

Calculated MW

202167 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat
Western blot, 0.1-0.5 µg/ml, Human

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 NaN₃.

Immunogen

E.coli-derived human Integrin beta 4 recombinant protein (Position: N28-A266). Human Integrin

beta 4 shares 88% and 86% amino acid (aa) sequences identity with mouse and rat Integrin beta 4, respectively.

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 Picoband 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). 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

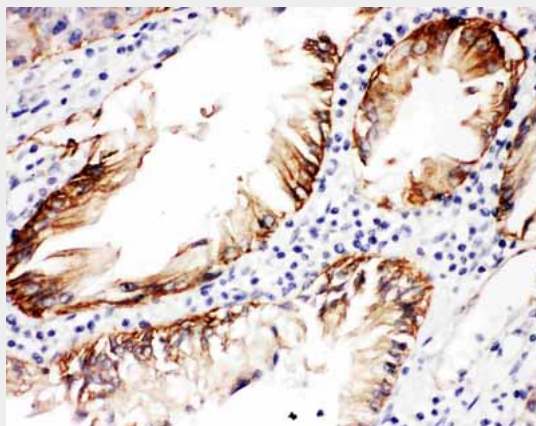
Integrin alpha-6/beta-4 is predominantly expressed by epithelia. Isoform beta-4D is also expressed in colon and placenta Isoform beta-4E is also expressed in epidermis, lung, duodenum, heart, spleen and stomach

Anti-Integrin Beta 4 Picoband Antibody - Protocols

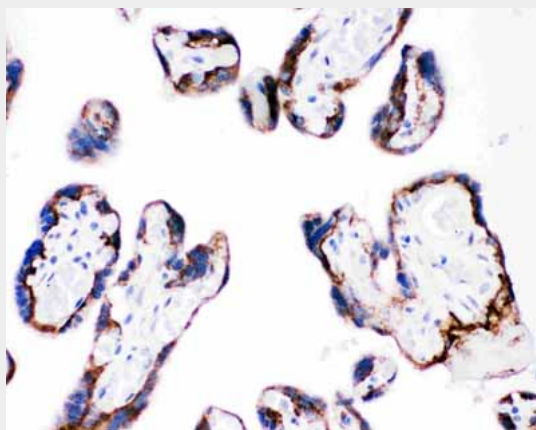
Provided below are standard protocols that you may find useful for product applications.

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

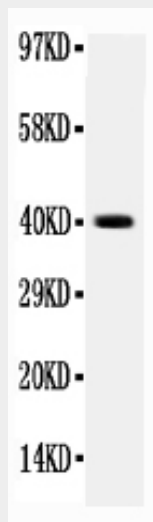
Anti-Integrin Beta 4 Picoband Antibody - Images



Anti-Integrin beta 4 Picoband antibody, ABO11732-1.JPGIHC(P): Human Intestinal Cancer Tissue



Anti-Integrin beta 4 Picoband antibody, ABO11732-2.JPGIHC(P): Human Placenta Tissue



Anti-Integrin beta 4 Picoband antibody, ABO11732-3.jpgAll lanes: Anti-ITGB4(ABO11732) at 0.5ug/mlWB: Recombinant Human Integrin beta4 Protein 0.5ngPredicted bind size: 40KDObserved bind size: 40KD

Anti-Integrin Beta 4 Picoband 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.