

# Anti-Integrin beta 4 ITGB4 Rabbit Monoclonal Antibody

**Catalog # ABO14215** 

## Specification

## Anti-Integrin beta 4 ITGB4 Rabbit Monoclonal Antibody - Product Information

Application WB, IHC
Primary Accession P16144
Host Rabbit
Isotype 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.

# Anti-Integrin beta 4 ITGB4 Rabbit Monoclonal Antibody - Additional Information

**Gene ID 3691** 

**Other Names** 

Integrin beta-4, GP150, CD104, ITGB4

Calculated MW 202167 MW KDa

**Application Details** 

WB 1:500-1:2000<br>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.

# **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.

#### **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.

## Anti-Integrin beta 4 ITGB4 Rabbit Monoclonal 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:<a href="http://www.uniprot.org/citations/20682778" target="\_blank">20682778</a>). ITGA6:ITGB4 binds to IGF1 and this binding is essential for IGF1 signaling (PubMed:<a href="http://www.uniprot.org/citations/22351760" target="\_blank">22351760</a>). ITGA6:ITGB4 binds to IGF2 and this binding is essential for IGF2 signaling (PubMed:<a href="http://www.uniprot.org/citations/28873464" target="blank">28873464</a>).

#### **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

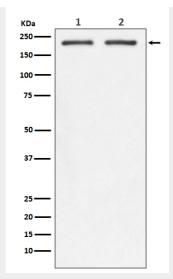
# Anti-Integrin beta 4 ITGB4 Rabbit Monoclonal Antibody - Protocols

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

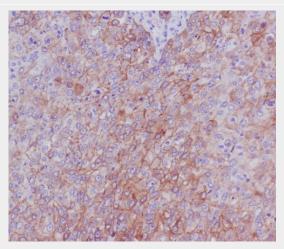
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### Anti-Integrin beta 4 ITGB4 Rabbit Monoclonal Antibody - 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.

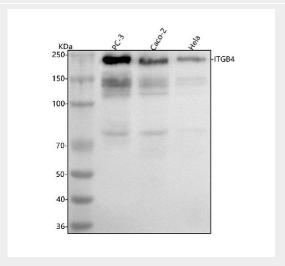


Figure 1. Western blot analysis of ITGB4 using anti-ITGB4 antibody (M01015). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing





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.