

## **Anti-Integrin alpha 5 Picoband Antibody**

**Catalog # ABO10219** 

## **Specification**

# Anti-Integrin alpha 5 Picoband Antibody - Product Information

Application WB, IHC-P, E

Primary Accession P08648
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Integrin alpha 5 detection. Tested with WB, IHC-P, Direct ELISA in Human; Mouse; Rat.

### Reconstitution

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

## Anti-Integrin alpha 5 Picoband Antibody - Additional Information

# **Gene ID 3678**

### **Other Names**

Integrin alpha-5, CD49 antigen-like family member E, Fibronectin receptor subunit alpha, Integrin alpha-F, VLA-5, CD49e, Integrin alpha-5 heavy chain, Integrin alpha-5 light chain, ITGA5, FNRA

### **Application Details**

Western blot, 0.1-0.5  $\mu$ g/ml<br/>br> Immunohistochemistry(Paraffin-embedded Section), 0.5-1  $\mu$ g/ml<br/>br> Direct ELISA, 0.1-0.5  $\mu$ g/ml<br/>br>

### **Subcellular Localization**

Membrane; Single-pass type I membrane protein. Cell junction, focal adhesion.

#### **Contents**

Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

# **Immunogen**

E. coli-derived human Integrin alpha 5 recombinant protein (Position: F42-A263).

### **Cross Reactivity**

No cross reactivity with other proteins.

Storage

At -20°C; for one year. After r°Constitution, 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.



### Anti-Integrin alpha 5 Picoband Antibody - Protein Information

Name ITGA5 (HGNC:6141)

**Synonyms FNRA** 

#### **Function**

Integrin alpha-5/beta-1 (ITGA5:ITGB1) is a receptor for fibronectin and fibrinogen. It recognizes the sequence R-G-D in its ligands. ITGA5:ITGB1 binds to PLA2G2A via a site (site 2) which is distinct from the classical ligand-binding site (site 1) and this induces integrin conformational changes and enhanced ligand binding to site 1 (PubMed:<a href="http://www.uniprot.org/citations/18635536" target="\_blank">18635536</a>, PubMed:<a href="http://www.uniprot.org/citations/25398877" target="\_blank">25398877</a>). ITGA5:ITGB1 acts as a receptor for fibrillin-1 (FBN1) and mediates R-G-D-dependent cell adhesion to FBN1 (PubMed:<a href="http://www.uniprot.org/citations/12807887" target="\_blank">12807887</a>, PubMed:<a href="http://www.uniprot.org/citations/12807887" target="\_blank">12807887</a>, P

href="http://www.uniprot.org/citations/12807887" target="\_blank">12807887</a>, PubMed:<a href="http://www.uniprot.org/citations/17158881" target="\_blank">17158881</a>). ITGA5:ITGB1 acts as a receptor for fibronectin (FN1) and mediates R-G-D-dependent cell adhesion to FN1 (PubMed:<a href="http://www.uniprot.org/citations/33962943" target="\_blank">33962943</a>). ITGA5:ITGB1 is a receptor for IL1B and binding is essential for IL1B signaling (PubMed:<a href="http://www.uniprot.org/citations/29030430" target="\_blank">29030430</a>). ITGA5:ITGB3 is a receptor for soluble CD40LG and is required for CD40/CD40LG signaling (PubMed:<a href="http://www.uniprot.org/citations/31331973" target="\_blank">31331973</a>).

### **Cellular Location**

Cell membrane; Single-pass type I membrane protein. Cell junction, focal adhesion

### **Tissue Location**

Expressed in placenta (at protein level).

### Anti-Integrin alpha 5 Picoband 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 alpha 5 Picoband Antibody - Images

# Anti-Integrin alpha 5 Picoband Antibody - Background

Integrin alpha-5, also known as FNRA or VLA5A, is a protein that in humans is encoded by the ITGA5 gene. The product of this gene belongs to the integrin alpha chain family. Integrins are integral membrane proteins composed of an alpha chain and a beta chain. This gene encodes the integrin alpha 5 chain. Alpha chain 5 undergoes post-translational cleavage in the extracellular domain to yield disulfide-linked light and heavy chains that join with beta 1 to form a fibronectin receptor. In addition to adhesion, integrins are known to participate in cell-surface mediated signalling.