

Anti-Integrin Alpha 5 Picoband Antibody
Catalog # ABO11945

Specification

Anti-Integrin Alpha 5 Picoband Antibody - Product Information

Application	WB
Primary Accession	P08648
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Integrin alpha-5(ITGA5) detection. Tested with WB, IHC-F, ICC, FCM 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

Calculated MW

114536 MW KDa

Application Details

Immunohistochemistry(Frozen Section), 0.5-1 µg/ml
Immunocytochemistry, 0.5-1 µg/ml
Western blot, 0.1-0.5 µg/ml
Flow Cytometry, 1-3^{1/4}µg/1x10⁶ cells

Subcellular Localization

Membrane; Single-pass type I membrane protein.

Protein Name

Integrin alpha-5

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃.

Immunogen

E.coli-derived human Integrin alpha 5 recombinant protein (Position: E787-E992). Human Integrin alpha 5 shares 86% amino acid (aa) sequence identity with mouse Integrin alpha 5.

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 alpha chain family.

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: [18635536](http://www.uniprot.org/citations/18635536)), PubMed: [25398877](http://www.uniprot.org/citations/25398877)). ITGA5:ITGB1 acts as a receptor for fibrillin-1 (FBN1) and mediates R-G-D-dependent cell adhesion to FBN1 (PubMed: [12807887](http://www.uniprot.org/citations/12807887)), PubMed: [17158881](http://www.uniprot.org/citations/17158881)). ITGA5:ITGB1 acts as a receptor for fibronectin (FN1) and mediates R-G-D-dependent cell adhesion to FN1 (PubMed: [33962943](http://www.uniprot.org/citations/33962943)). ITGA5:ITGB1 is a receptor for IL1B and binding is essential for IL1B signaling (PubMed: [29030430](http://www.uniprot.org/citations/29030430)). ITGA5:ITGB3 is a receptor for soluble CD40LG and is required for CD40/CD40LG signaling (PubMed: [31331973](http://www.uniprot.org/citations/31331973)).

Cellular Location

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

Tissue Location

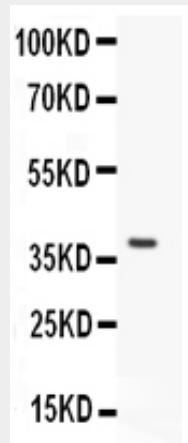
Expressed in placenta (at protein level).

Anti-Integrin Alpha 5 Picoband Antibody - Protocols

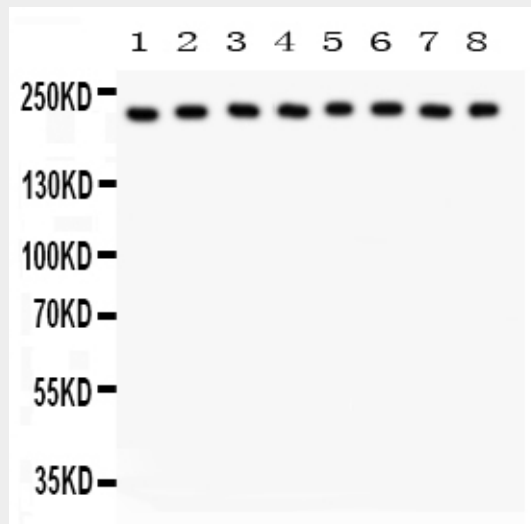
Provided below are standard protocols that you may find useful for product applications.

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

Anti-Integrin Alpha 5 Picoband Antibody - Images



Anti- Integrin alpha 5 Picoband antibody, ABO11945, Western blotting All lanes: Anti Integrin alpha 5 (ABO11945) at 0.5ug/ml WB: Recombinant Human Integrin alpha 5 Protein 0.5ng Predicted bind size: 39KD Observed bind size: 39KD



Anti- Integrin alpha 5 Picoband antibody, ABO11945, Western blotting All lanes: Anti Integrin alpha 5 (ABO11945) at 0.5ug/ml Lane 1: Rat Brain Tissue Lysate at 50ug Lane 2: Mouse Brain Tissue Lysate at 50ug Lane 3: MM231 Whole Cell Lysate at 40ug Lane 4: HELA Whole Cell Lysate at 40ug Lane 5: JURKAT Whole Cell Lysate at 40ug Lane 6: 293T Whole Cell Lysate at 40ug Lane 7: NEURO Whole Cell Lysate at 40ug Lane 8: PC-12 Whole Cell Lysate at 40ug Predicted bind size: 115KD Observed bind size: 220KD

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.