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Anti-Integrin Alpha 5 Picoband Antibody

Catalog # ABO11945

Specification

Anti-Integrin Alpha 5 Picoband Antibody - Product Information

Application	**WB, IHC-F, FC, ICC**
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, 1-3Î¼g/1x10⁶cells

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 NaN3.

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 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.

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, PubMed:25398877). ITGA5:ITGB1 acts as a receptor for fibrillin-1 (FBN1) and mediates R-G-D-dependent cell adhesion to FBN1 (PubMed:12807887, PubMed:17158881). ITGA5:ITGB1 acts as a receptor for fibronectin (FN1) and mediates R-G-D-dependent cell adhesion to FN1 (PubMed:33962943). ITGA5:ITGB1 is a receptor for IL1B and binding is essential for IL1B signaling (PubMed:29030430). ITGA5:ITGB3 is a receptor for soluble CD40LG and is required for CD40/CD40LG signaling (PubMed: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 Cytomety
- Cell Culture

Anti-Integrin Alpha 5 Picoband Antibody - Images

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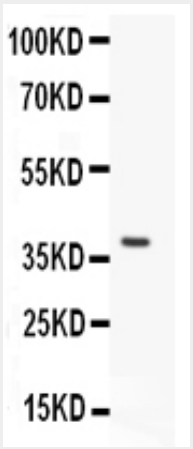
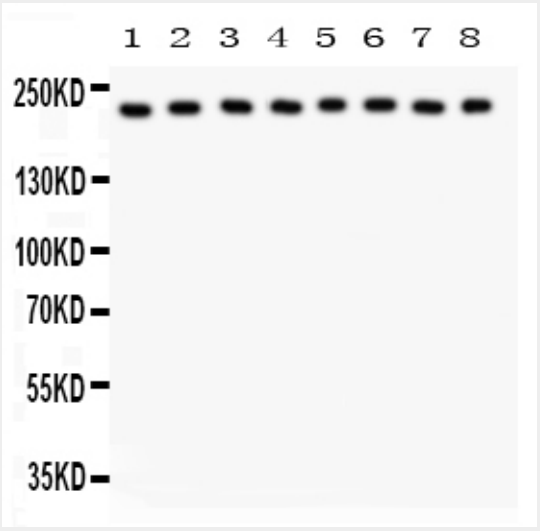


Anti- Integrin alpha 5 Picoband antibody, ABO11945, Western blottingAll lanes: Anti Integrin alpha 5 (ABO11945) at 0.5ug/mlWB: Recombinant Human Integrin alpha 5 Protein 0.5ngPredicted bind size: 39KDObserved bind size: 39KD



Anti- Integrin alpha 5 Picoband antibody, ABO11945, Western blottingAll lanes: Anti Integrin alpha 5 (ABO11945) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Mouse Brain Tissue Lysate at 50ugLane 3: MM231 Whole Cell Lysate at 40ugLane 4: HELA Whole Cell Lysate at 40ugLane 5: JURKAT Whole Cell Lysate at 40ugLane 6: 293T Whole Cell Lysate at 40ugLane 7: NEURO Whole Cell Lysate at 40ugLane 8: PC-12 Whole Cell Lysate at 40ugPredicted bind size: 115KDObserved 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.