

Anti-Integrin Alpha 4 Picoband Antibody
Catalog # ABO12334**Specification**

Anti-Integrin Alpha 4 Picoband Antibody - Product Information

Application	WB, IHC-P
Primary Accession	P13612
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Integrin alpha-4(ITGA4) detection. Tested with WB, IHC-P in Human;Rat.

Reconstitution

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

Anti-Integrin Alpha 4 Picoband Antibody - Additional Information

Gene ID 3676

Other Names

Integrin alpha-4, CD49 antigen-like family member D, Integrin alpha-IV, VLA-4 subunit alpha, CD49d, ITGA4, CD49D

Calculated MW

114900 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, Rat

Subcellular Localization

Membrane; Single-pass type I membrane protein.

Protein Name

Integrin alpha-4

Contents

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

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human Integrin alpha 4 (999-1028aa MWKAGFFKRQYKSILQEENRRDSWSYINS K), different from the related mouse sequence by one amino acid.

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.

Anti-Integrin Alpha 4 Picoband Antibody - Protein Information

Name ITGA4

Synonyms CD49D

Function

Integrins alpha-4/beta-1 (VLA-4) and alpha-4/beta-7 are receptors for fibronectin. They recognize one or more domains within the alternatively spliced CS-1 and CS-5 regions of fibronectin. They are also receptors for VCAM1. Integrin alpha-4/beta-1 recognizes the sequence Q-I-D-S in VCAM1. Integrin alpha-4/beta-7 is also a receptor for MADCAM1. It recognizes the sequence L-D-T in MADCAM1. On activated endothelial cells integrin VLA-4 triggers homotypic aggregation for most VLA-4-positive leukocyte cell lines. It may also participate in cytolytic T-cell interactions with target cells. ITGA4:ITGB1 binds to fractalkine (CX3CL1) and may act as its coreceptor in CX3CR1-dependent fractalkine signaling (PubMed: [23125415](http://www.uniprot.org/citations/23125415)). ITGA4: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)). Integrin ITGA4:ITGB1 represses PRKCA-mediated L-type voltage-gated channel Ca(2+) influx and ROCK-mediated calcium sensitivity in vascular smooth muscle cells via its interaction with SVEP1, thereby inhibiting vasocontraction (PubMed: [35802072](http://www.uniprot.org/citations/35802072)).

Cellular Location

Membrane; Single-pass type I membrane protein

Tissue Location

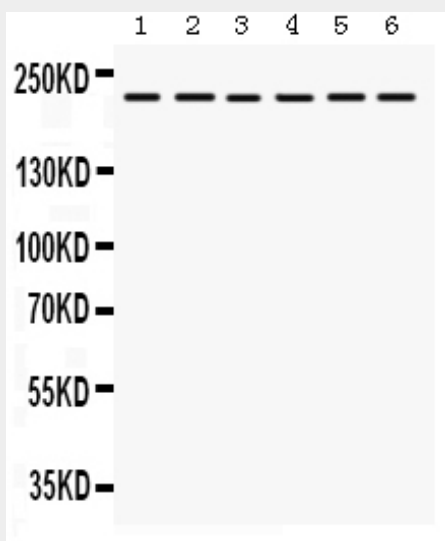
Expressed in vascular smooth muscle cells (at protein level).

Anti-Integrin Alpha 4 Picoband Antibody - Protocols

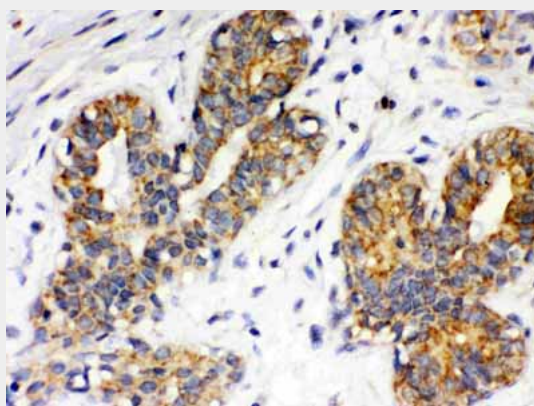
Provided below are standard protocols that you may find useful for product applications.

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

Anti-Integrin Alpha 4 Picoband Antibody - Images



Anti- Integrin alpha 4 Picoband antibody, ABO12334, Western blotting All lanes: Anti Integrin alpha 4 (ABO12334) at 0.5ug/ml
Lane 1: Rat Liver Tissue Lysate at 50ug
Lane 2: Rat Kidney Tissue Lysate at 50ug
Lane 3: JURKAT Whole Cell Lysate at 40ug
Lane 4: 22RV1 Whole Cell Lysate at 40ug
Lane 5: HEPG2 Whole Cell Lysate at 40ug
Lane 6: SMMC Whole Cell Lysate at 40ug
Predicted bind size: 115KD
Observed bind size: 220KD



Anti- Integrin alpha 4 Picoband antibody, ABO12334, IHC(P) IHC(P): Human Mammary Cancer Tissue

Anti-Integrin Alpha 4 Picoband Antibody - Background

ITGA4/Integrin alpha4 is an integrin alpha subunit. It makes up half of the $\alpha 4 \beta 1$ lymphocyte homing receptor. The product of this gene belongs to the integrin alpha chain family of proteins. Integrins are heterodimeric integral membrane proteins composed of an alpha chain and a beta chain. This gene encodes an alpha 4 chain. Unlike other integrin alpha chains, alpha 4 neither contains an I-domain, nor undergoes disulfide-linked cleavage. Alpha 4 chain associates with either beta 1 chain or beta 7 chain. ITGA4 is also mapped to 2q31-q32 by fluorescence in situ hybridization.