

Anti-Integrin Alpha 3 Antibody

Catalog # ABO10934

Specification

Anti-Integrin Alpha 3 Antibody - Product Information

ApplicationWB, IHC-PPrimary AccessionP26006HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Integrin alpha-3(ITGA3) detection. Tested with WB, IHC-P inHuman;Mouse;Rat.Human;Mouse;Rat.

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

Anti-Integrin Alpha 3 Antibody - Additional Information

Gene ID 3675

Other Names Integrin alpha-3, CD49 antigen-like family member C, FRP-2, Galactoprotein B3, GAPB3, VLA-3 subunit alpha, CD49c, Integrin alpha-3 heavy chain, Integrin alpha-3 light chain, ITGA3, MSK18

Calculated MW 116612 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Human, Rat, Mouse, By Heat
br>Western blot, 0.1-0.5 μg/ml, Human, Rat, Mouse

Subcellular Localization

Cell membrane ; Single-pass type I membrane protein . Cell membrane ; Lipid-anchor . Cell projection, invadopodium membrane ; Single-pass type I membrane protein . Cell projection, filopodium membrane ; Single-pass type I membrane protein . Enriched preferentially at invadopodia, cell membrane protrusions that correspond to sites of cell invasion, in a collagen-dependent manner.

Tissue Specificity

Isoform 1 is widely expressed. Isoform 2 is expressed in brain and heart. In brain, both isoforms are exclusively expressed on vascular smooth muscle cells, whereas in heart isoform 1 is strongly expressed on vascular smooth muscle cells, isoform 2 is detected only on endothelial vein cells.

Protein Name Integrin alpha-3

Contents



Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen A synthetic peptide corresponding to a sequence at the N-terminus of human Integrin alpha 3(51-67aa LFGYSVALHRQTERQQR), identical to the related rat and mouse sequences.

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 3 Antibody - Protein Information

Name ITGA3

Synonyms MSK18

Function

Integrin alpha-3/beta-1 is a receptor for fibronectin, laminin, collagen, epiligrin, thrombospondin and CSPG4. Integrin alpha- 3/beta-1 provides a docking site for FAP (seprase) at invadopodia plasma membranes in a collagen-dependent manner and hence may participate in the adhesion, formation of invadopodia and matrix degradation processes, promoting cell invasion. Alpha-3/beta-1 may mediate with LGALS3 the stimulation by CSPG4 of endothelial cells migration.

Cellular Location

Cell membrane; Single-pass type I membrane protein. Cell membrane; Lipid- anchor. Cell projection, invadopodium membrane; Single-pass type I membrane protein. Cell projection, filopodium membrane; Single-pass type I membrane protein. Note=Enriched preferentially at invadopodia, cell membrane protrusions that correspond to sites of cell invasion, in a collagen-dependent manner.

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Anti-Integrin Alpha 3 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry



- Immunofluorescence
- Immunoprecipitation
- <u>Flow Cytomety</u>
- <u>Cell Culture</u>

Anti-Integrin Alpha 3 Antibody - Images



Anti-Integrin alpha 3 antibody, ABO10934, Western blottingLane 1: Rat Heart Tissue LysateLane 2: HELA Cell Lysate



Anti-Integrin alpha 3 antibody, ABO10934, IHC(P)IHC(P): Rat Brain Tissue





Anti-Integrin alpha 3 antibody, ABO10934, IHC(P)IHC(P): Human Intestinal Cancer Tissue Anti-Integrin Alpha 3 Antibody - Background

ITGA3(INTEGRIN, ALPHA-3), also called CD49C, VLA3 or GAPB3, is a protein that in humans is encoded by the ITGA3 gene. ITGA3 is an integrin alpha subunit which is also a member of the family of cell surface adhesion molecules. ITGA3 is mapped to chromosome 17 and its exact cytogenetic location is 17q21.33. ITGA3 makes up half of the alpha3beta1 integrin duplex that plays a role in neural migration and corticogenesis together with beta-1 subunit. A functional link between DAB1 phosphorylation and ITGA3 signaling drives the timely detachment of migrating neurons from radial glial fibers. Expression of human ITGA3 increased the infectivity of virus for Chinese hamster ovary cells. ITGA3 also contains 13 potential N-glycosylation sites, 2 potential cleavage sites, and the 7 N-terminal repeating units characteristic of ITGAs. Recombinant ITGA3 is expressed as a 150-kD protein as the same size as the native protein by the western blot analysis.