

Anti-Integrin Alpha 1 Antibody
Catalog # ABO10532**Specification**

Anti-Integrin Alpha 1 Antibody - Product Information

Application	WB, IHC-P
Primary Accession	P56199
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Integrin alpha-1(ITGA1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

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

Anti-Integrin Alpha 1 Antibody - Additional Information

Gene ID 3672

Other Names

Integrin alpha-1, CD49 antigen-like family member A, Laminin and collagen receptor, VLA-1, CD49a, ITGA1

Calculated MW

130848 MW KDa

Application Details

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

Subcellular Localization

Membrane; Single-pass type I membrane protein.

Protein Name

Integrin alpha-1

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 C-terminus of human Integrin alpha 1(1121-1134aa SNQKRELAIQISKD), different from the related mouse and rat sequences 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.

Sequence Similarities

Belongs to the integrin alpha chain family.

Anti-Integrin Alpha 1 Antibody - Protein Information

Name ITGA1

Function

Integrin alpha-1/beta-1 is a receptor for laminin and collagen. It recognizes the proline-hydroxylated sequence G-F-P-G-E-R in collagen. Involved in anchorage-dependent, negative regulation of EGF-stimulated cell growth.

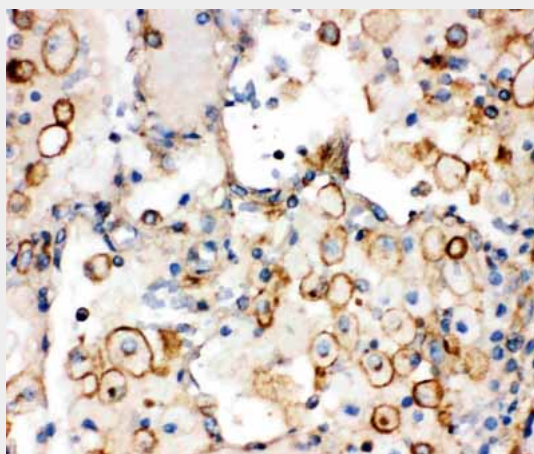
Cellular Location

Membrane; Single-pass type I membrane protein.

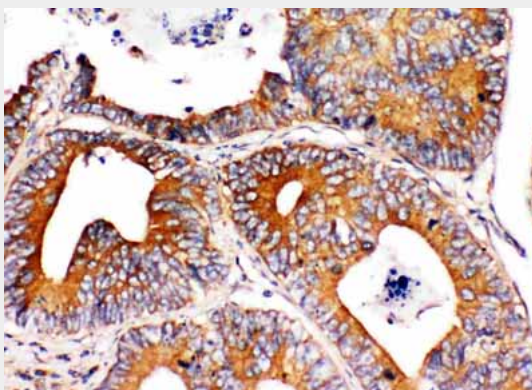
Anti-Integrin Alpha 1 Antibody - Protocols

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

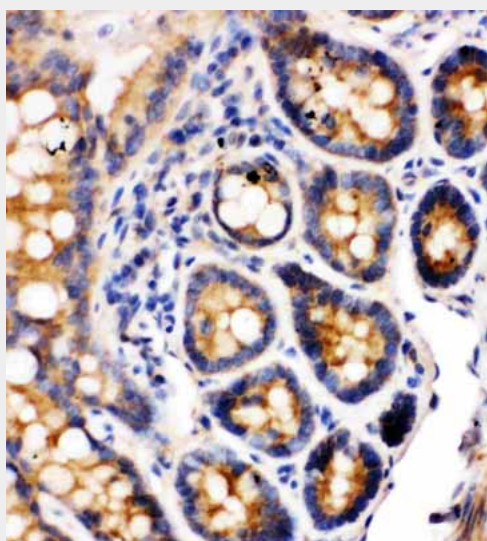
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Integrin Alpha 1 Antibody - Images

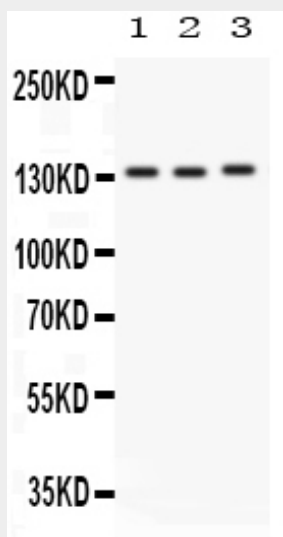
Anti-Integrin alpha 1 antibody, ABO10532, IHC(P)IHC(P): Human Lung Cancer Tissue



Anti-Integrin alpha 1 antibody, ABO10532, IHC(P)IHC(P): Human Intestinal Cancer Tissue



Anti-Integrin alpha 1 antibody, ABO10532, IHC(P)IHC(P): Rat Intestine Tissue



Anti-Integrin alpha 1 antibody, ABO10532, Western blotting All lanes: Anti ITGA1 (ABO10532) at 0.5ug/ml
Lane 1: Rat Brain Tissue Lysate at 50ug
Lane 2: HELA Whole Cell Lysate at 40ug
Lane 3: SW620 Whole Cell Lysate at 40ug
Predicted bind size: 131KD
Observed bind size: 131KD

Anti-Integrin Alpha 1 Antibody - Background

Integrin alpha 1 (ITGA1) chain associates with the beta 1 (ITGB1) chain to form a heterodimer that functions as a dual laminin/collagen receptor in neural cells and hematopoietic cells. ITGA1 has a 206-amino acid I domain in its N-terminal half, followed by 3 divalent cation-binding sites and a C-terminal transmembrane domain with a short cytoplasmic tail. It also has 28 potential N-glycosylation sites. Human ITGA1 was expressed in a mouse fibroblast cell line as a 180-kD protein. ITGA1 is involved in the early remodeling of osteoarthritic cartilage and plays an essential role in the regulation of mesenchymal stem cell proliferation and cartilage production. It also plays an essential role in the regulation of MSC proliferation and cartilage production.