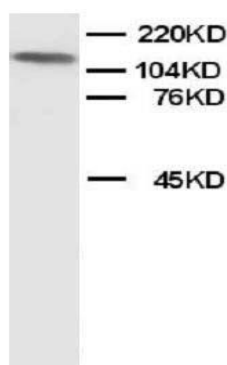
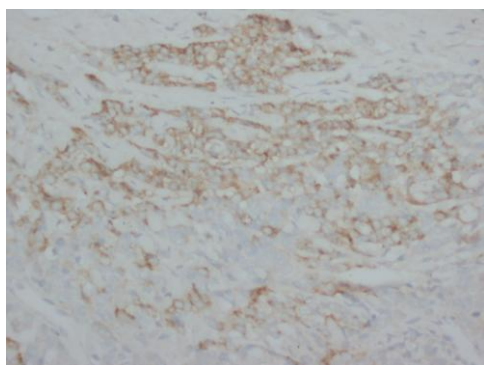




Polyclonal Anti-Integrin $\alpha 1$, *ITGA1*



Catalogue No. PA1045

Lot No. 03F01

Ig type: rabbit IgG

Size: 100 μ g/vial

Specificity

Human, mouse, rat.

No cross reactivity with other proteins.

Recommended application

Western blot

Immunohistochemistry(P)

Immunogen

A peptide at the C-terminus of ITGA1 of human origin, identical to the related mouse sequence.

Purity

Immunogen affinity purified.

Application

Western blot

At 1-2 μ g/ml with the appropriate system to detect ITGA1 in cells and tissues.

Immunohistochemistry(P)

At 1-2 μ g/ml to detect ITGA1 in formalin fixed and paraffin embedded tissues. Boiling the sections is required.

Other applications have not been tested.

Optimal dilutions should be determined by end user.

Contents

Each vial contains 50% glycerol, 0.9mg NaCl, 0.2mg Na₂HPO₄.

Reconstitution

1.2% sodium acetate or neutral PBS. If 0.5ml of PBS is used, the antibody concentration will be 100 μ g/ml.

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 longer time.

To reorder contact us at:

Antagene, Inc.

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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.

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3. Ekholm, E.; Hankenson, K. D.; Uusitalo, H.; Hiltunen, A.; Gardner, H.; Heino, J.; Penttinen, R. : Diminished callus size and cartilage synthesis in alpha-1 beta-1 integrin-deficient mice during bone fracture healing. *Am. J. Path.* 160: 1779-1785, 2002.