ARG44850
anti-ITGB1BP1 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody recognizes ITGB1BP1
Tested Reactivity	Hu
Tested Application	WB
Host	Mouse
Clonality	Monoclonal
Isotype	IgG
Target Name	ITGB1BP1
Species	Human
Conjugation	Un-conjugated
Alternate Names	ITGB1BP1; Integrin Subunit Beta 1 Binding Protein 1; ICAP1; Integrin Cytoplasmic Domain-Associated Protein 1; ICAP-1alpha; ICAP-1A; ICAP-1B ICAP1A; ICAP1B; Integrin Cytoplasmic Domain-Associated Protein 1-Alpha; Integrin Cytoplasmic Domain-Associated Protein 1-Beta; Integrin Beta-1-Binding Protein 1; Bodenin; Integrin Beta 1 Binding Protein 1; ICAP-1

Application Instructions

Application table

Application	Dilution
WB	1:1000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

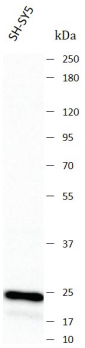
Form	Liquid
Purification	Protein A purified.
Buffer	PBS with 0.09% sodium azide
Preservative	0.09% sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	ITGB1BP1

Gene Full Name	Integrin Subunit Beta 1 Binding Protein 1
Background	The cytoplasmic domains of integrins are essential for cell adhesion. The protein encoded by this gene binds to the beta1 integrin cytoplasmic domain. The interaction between this protein and beta1 integrin is highly specific. Two isoforms of this protein are derived from alternatively spliced transcripts. The shorter form of this protein does not interact with the beta1 integrin cytoplasmic domain. The longer form is a phosphoprotein and the extent of its phosphorylation is regulated by the cell-matrix interaction, suggesting an important role of this protein during integrin-dependent cell adhesion. Several transcript variants, some protein-coding and some non-protein coding, have been found for this gene. [provided by RefSeq, Jan 2016]
Function	Key regulator of the integrin-mediated cell-matrix interaction signaling by binding to the ITGB1 cytoplasmic tail and preventing the activation of integrin alpha-5/beta-1 (heterodimer of ITGA5 and ITGB1) by talin or FERMT1. Plays a role in cell proliferation, differentiation, spreading, adhesion and migration in the context of mineralization and bone development and angiogenesis. Stimulates cellular proliferation in a fibronectin-dependent manner. Involved in the regulation of beta-1 integrin-containing focal adhesion (FA) site dynamics by controlling its assembly rate during cell adhesion; inhibits beta-1 integrin clustering within FA by directly competing with talin TLN1, and hence stimulates osteoblast spreading and migration in a fibronectin- and/or collagen-dependent manner. Acts as a guanine nucleotide dissociation inhibitor (GDI) by regulating Rho family GTPases during integrin-mediated cell matrix adhesion; reduces the level of active GTP-bound form of both CDC42 and RAC1 GTPases upon cell adhesion to fibronectin. Stimulates the release of active CDC42 from the membranes to maintain it in an inactive cytoplasmic pool. Participates in the translocation of the Rho-associated protein kinase ROCK1 to membrane ruffles at cell leading edges of the cell membrane, leading to an increase of myoblast cell migration on laminin. Plays a role in bone mineralization at a late stage of osteoblast differentiation; modulates the dynamic formation of focal adhesions into fibrillar adhesions, which are adhesive structures responsible for fibronectin deposition and fibrillogenesis. Plays a role in blood vessel development; acts as a negative regulator of angiogenesis by attenuating endothelial cell proliferation and migration, lumen formation and sprouting angiogenesis by promoting AKT phosphorylation and inhibiting ERK1/2 phosphorylation through activation of the Notch signaling pathway. Promotes transcriptional activity of the MYC promoter. [Uniprot]
PTM	Phosphoprotein. [Uniprot]
Cellular Localization	Cell membrane, Cell projection, Cytoplasm, Cytoskeleton, Membrane, Nucleus. [Uniprot]

Images



ARG44850 anti-ITGB1BP1 antibody WB image

Western blot: SH-SY5 stained with ARG44850 anti-ITGB1BP1 antibody at 1 µg/mL dilution.