

# Datasheet for ABIN7554226

## ITGB1BP1 Protein (AA 1-200) (His tag)



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Quantity:	1 mg	
Target:	ITGB1BP1	
Protein Characteristics:	AA 1-200	
Origin:	Human	
Source:	HEK-293 Cells	
Protein Type:	Recombinant	
Purification tag / Conjugate:	This ITGB1BP1 protein is labelled with His tag.	
Application:	Western Blotting (WB), SDS-PAGE (SDS)	
Product Details		
Product Details  Purpose:	Custom-made recombinat ITGB1BP1 Protein expressed in mammalien cells.	
	Custom-made recombinat ITGB1BP1 Protein expressed in mammalien cells.  MFRKGKKRHS SSSSQSSEIS TKSKSVDSSL GGLSRSSTVA SLDTDSTKSS GQSNNNSDTC	
Purpose:	<u> </u>	
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Purpose:	MFRKGKKRHS SSSSQSSEIS TKSKSVDSSL GGLSRSSTVA SLDTDSTKSS GQSNNNSDTC AEFRIKYVGA IEKLKLSEGK GLEGPLDLIN YIDVAQQDGK LPFVPPEEEF IMGVSKYGIK	
Purpose:	MFRKGKKRHS SSSSQSSEIS TKSKSVDSSL GGLSRSSTVA SLDTDSTKSS GQSNNNSDTC AEFRIKYVGA IEKLKLSEGK GLEGPLDLIN YIDVAQQDGK LPFVPPEEEF IMGVSKYGIK VSTSDQYDVL HRHALYLIIR MVCYDDGLGA GKSLLALKTT DASNEEYSLW VYQCNSLEQA	
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• State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

#### **Target Details**

Target:	ITGB1BP1
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Alternative Name: ITGB1BP1 (ITGB1BP1 Products)

Background:

Integrin beta-1-binding protein 1 (Integrin cytoplasmic domain-associated protein 1) (ICAP-1), 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 quanine nucleotide dissociation inhibitor (GDI) by regulating Rho family GTPases during integrinmediated 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. {ECO:0000269|PubMed:11741838, ECO:0000269|PubMed:11807099, ECO:0000269|PubMed:11919189, ECO:0000269|PubMed:12473654, ECO:0000269|PubMed:15703214, ECO:0000269|PubMed:17916086, ECO:0000269|PubMed:20616313,

ECO:0000269|PubMed:21768292, ECO:0000269|Ref.19}.

Molecular Weight: 21.8 kDa

UniProt: 014713

Pathways: Tube Formation

### **Application Details**

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies

as well. As the protein has not been tested for functional studies yet we cannot offer a

guarantee though.

Restrictions: For Research Use only

#### Handling

Format:

Buffer:

The buffer composition is at the discretion of the manufacturer.

Handling Advice:

Avoid repeated freeze-thaw cycles.

Storage:

-80 °C

Storage Comment:

Store at -80°C.

Expiry Date: 12 months