

# Recombinant Human Integrin, Beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12), GST-tagged

Cat. No. ITGB1-1181H Lot. No. (See product label)

## SPECIFICATION

<b>Product Overview</b>	Recombinant human ITGB1 is a 130 kDa transmembrane glycoprotein including a GST Tag, which is expressed in E. coli.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>Description</b>	<p>Integrin beta1 (ITGB1), also known as CD29, is a 130 kDa transmembrane glycoprotein that forms noncovalent complexes with various Integrin alpha subunits (including alpha 1, alpha 2, alpha 3, alpha 4, alpha 5, and alpha 6, also known as CD49a, CD49b, CD49c, CD49d, CD49e, and CD49f, respectively) to form the functional receptors that bind to specific extracellular matrix proteins. Integrin receptors are involved in the regulation of a variety of important biological functions, including embryonic development, wound repair, hemostasis, and prevention of programmed cell death. They are also implicated in abnormal pathological states such as tumor directed angiogenesis, tumor cell growth, and metastasis. These heterodimeric receptors bridge the cytoplasmic actin cytoskeleton with proteins present in the extracellular matrix and/or on adjacent cells. The clustering of integrins on a cell surface leads to the formation of focal contacts. Interactions between integrins and the extracellular matrix lead to activation of signal transduction pathways and regulation of gene expression.</p>

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Form</b>	Liquid in 50 mM Tris-Acetate, pH 7.5 + 1 mM EDTA + 20% Glycerol.
<b>Molecular Weight</b>	48 kDa
<b>Concentration</b>	100 µg/mL
<b>Applications</b>	ELISA, Inhibition Assays, Western Blot
<b>Storage</b>	Store at -20°C to -80°C. 1 year. Avoid repeated freeze/thaw cycles.
<b>Official Symbol</b>	ITGB1
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	ITGB1 integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12) [Homo sapiens ]
<b>Synonyms</b>	ITGB1; integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12); CD29; FN1R; MDF2; VLAB; GPIIA; MSK12; VLA-BETA; integrin beta-1; OTTHUMP00000019420; integrin VLA-4 beta subunit; very late activation protein, beta polypeptide; Fibronectin receptor subunit beta; CD29 antigen
<b>Gene ID</b>	<a href="#">3688</a>
<b>mRNA Refseq</b>	<a href="#">NM_002211</a>
<b>Protein Refseq</b>	<a href="#">NP_002202</a>
<b>MIM</b>	<a href="#">135630</a>
<b>UniProt ID</b>	P05556

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

**Chromosome  
Location**

10p11.2

**Pathway**

Adaptive ImmuneSystem; Angiopoietin receptor Tie2-mediated signaling; Axon guidance;Bacterial invasion of epithelial cells; CHL1 interactions; Cell surfaceinteractions at the vascular wall; Dilated cardiomyopathy; ECM-receptorinteraction; Hypertrophic cardiomyopathy (HCM); Integrin cell surfaceinteractions; Pathogenic Escherichia coli infection; Reelin signalingpathway; Semaphorin interactions; Toxoplasmosis; VEGFR3 signaling inlymphatic endothelium

**Function**

actin binding;alpha-actinin binding; collagen binding; fibronectin binding; glycoproteinbinding; integrin binding; laminin binding; peptide binding; proteasebinding; protein binding; protein domain specific binding; proteinheterodimerization activity; protein kinase binding; receptor activity

**Rendering based  
onPDB 1K11.**


 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA