

**ITGB1, 1-728aa, Human, His-tag, Baculovirus**

**Cat.NO.: TP02693**

3th Edition

**Synonyms:** Integrin beta-1 isoform 1A, ITGB1, CD29, FNRB, GPIIA, MDF2, MSK12, VLA-BETA, VLAB

**Description:** ITGB1, also known as integrin beta-1 isoform 1A, is the only alpha 1 integrin family adhesion receptor, one of twelve integrins that share the beta 1 subunit, and one of four collagen binding integrins. Integrin family members are membrane receptors involved in cell adhesion and recognition in a variety of processes including embryogenesis, hemostasis, tissue repair, immune response and metastatic diffusion of tumor cells. This protein is reported to down-regulate EGF-R signaling, increase expression of caveolin-1, reduce production of reactive oxygen species, regulate collagen expression, control MMP collagenase and gelatinase activity, and mediate the renal basement membrane disorder Alport syndrome. Recombinant human ITGB1 protein, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

**Form:** Liquid. In Phosphate Buffered Saline (pH 7.4) containing 10% glycerol.

**Molecular Weight:** 79.4kDa (716aa) 70-100kDa (SDS-PAGE under reducing conditions.)

**Sequences:**

QTDENRCLKANAKSCGECIQAGPNCGWCTNSTFLQEGMPTSARCDDLEALKKKKGCPPDDIENPRGSKDIKKNKNV  
TNRSGTAEKLPEDITQIQPQQLVLRRLRSGEPQTFTLKFKAEDYPIDLYYLMDSLYSMKDDLENVKSGLTDLME  
MRRITSDFRIGFGSFVEKTVMPYISTTPAKLRNPCTSEQNCTSPFSYKNVLSLTNKGEVFNELVGKQRISGNLDSPE  
GGFDAIMQVAVCGSLIGWRNVTRLLVFSTDAGFHFAGDGKLGIVLPNDGQCHLENNMYTMSHYDYPSIAHLVQ  
KLSENNIQTIFAVTEEFQPVYKELKNLIPKSAVGTLSSNVIQLIIDAYNSLSSEVILENGKLSEGVITISYKSYCKNGV  
NGTGENGGRKCSNISIGDEVQFEISITSNKCPKKDSDFSIRPLGFTTEEVEVILQYICECECQSEGIPESPKCHEGNGT  
FECGACRCNEGRVGRHCECSTDEVNSEDMDAYCRKENSSEICSNNGECVCGQCVCRKRDNTNEIYSGKFCECD  
NFNCDRSNGLICGGNGVCKCRVCECNPNYTGSACDCSLDTSTCEASNGQICNGRGICECGVCKCTDPKFQGGQTC  
EMCQTCLGVCAEHKECVQCRAFNKGEKDTCTQECSYFNITKVESRDKLPQPVQPDVSHCKEKDVDDCWFFYFT  
YSVNGNNEVMVHVVENPECPTGPDLEHHHHHHH

**Purity:** > 95% by HPLC

**Concentration:** 1mg/ml (determined by Absorbance 280nm)

**Endotoxin Level:** <1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.