

Human Integrin alpha 1 beta 1 (ITGA1&ITGB1) Heterodimer Protein

Cat. No. ITG-HM1A1

Description

Source	Recombinant Human Integrin alpha 1 beta 1 (ITGA1&ITGB1) Heterodimer Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Phe29-Pro1141(ITGA1) acidic tail & Gln21-Asp728(ITGB1) basic tail.
Accession	P56199-1(ITGA1)&P05556-1(ITGB1)
Molecular Weight	The protein has a predicted MW of 129.1 kDa(ITGA1)&83.2 kDa(ITGB1). Due to glycosylation, the protein migrates to 160-200 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE

Formulation and Storage

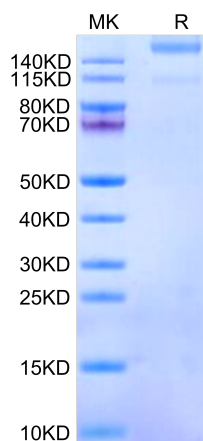
Formulation	Lyophilized from 0.22µm filtered solution in 50mM Tris, 150mM NaCl (pH 7.5). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Integrin $\alpha 1\beta 1$ is a heterodimer of the Integrin subunits alpha 1 and beta 1 and is one of four collagenbinding integrins, it preferentially binds Collagens I, IV, VI, XIII and XVI, but also binds Laminin. Integrin $\alpha 1\beta 1$ is widely expressed in mesenchyme and the immune system, as well as a minority of epithelial tissues. It can suppress EGFR signaling, increase expression of Caveolin-1, reduce production of reactive oxygen species, regulate collagen expression, regulate MMP collagenase and gelatinase activity, and mediates the renal basement membrane disorder Alport syndrome.

Assay Data

Bis-Tris PAGE



Human ITGA1&ITGB1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.