

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



Cat. No. ITG-HM1A1

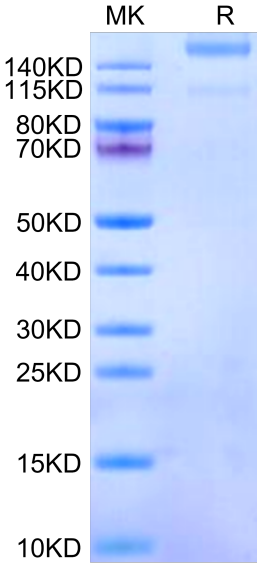
Description	
Source	Recombinant Human Integrin alpha 1 beta 1 (ITGA1&ITGB1) Heterodimer Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Phe29-Pro1141(ITGA1) acidic tail & Gln21-Asp728(ITGB1) basic tail.
Accession	P56199-1(ITGA1)&P05556-1(ITGB1)
Molecular Weight	The protein 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 1 EU 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	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
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 α1β1 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 α1β1 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%.