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(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 Tris-Bis PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE

Formulation and Storage

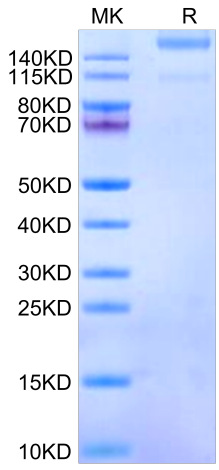
Formulation	Lyophilized from 0.22μm filtered solution in 50mM Tris, 150mM NaCl (pH 7.5). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 μg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt.-20 to -80°C for 3-6 months in unopened state after reconstitution.2-8°C for 2-7 days 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 suppresse 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

Tris-Bis PAGE



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

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