Biotinylated Human Integrin alpha V beta 1 (ITGAV&ITGB1) Heterodimer Protein

Cat. No. ITG-HM4V1B

Description

Source	Recombinant Biotinylated Human Integrin alpha V beta 1 (ITGAV&ITGB1) Heterodimer Protein is expressed as a heterodimer of ITGAV and ITGB1 by co-expression in HEK293. Subunit ITGAV is fused with a His tag and a Avi tag at the C-terminus and subunit ITGB1 contains no tag.
	It contains Phe31-Val992 (ITGAV) acidic tail and Gln21-Asp728 (ITGB1) basic tail.
Accession	P06756-1(ITGAV)&P05556-1(ITGB1)
Molecular Weight	The protein has a predicted MW of 114 kDa (ITGAV) and 83.2 kDa (ITGB1). Due to glycosylation, the protein migrates to 140-170 kDa (ITGAV) and 105-135 kDa (ITGB1) 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
	> 90% as determined by HPLC

Formulation and Storage

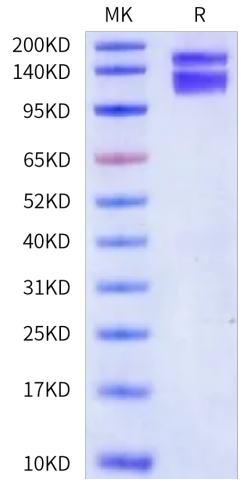
Formulation	Lyophilized from 0.22 μm filtered solution in PBS, 8% trehalose (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-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

Integrins are transmembrane heterodimeric receptors that contribute to diverse biological functions and play a conserved role in mediating cell adhesion to fixed extracellular ligands and in the maintenance of tissue integrity. αVβ1 is the major integrin on several different primary fibroblasts responsible for binding to TGFb1 LAP and for mediating activation of latent TGFb by these cells.

Assay Data

Bis-Tris PAGE



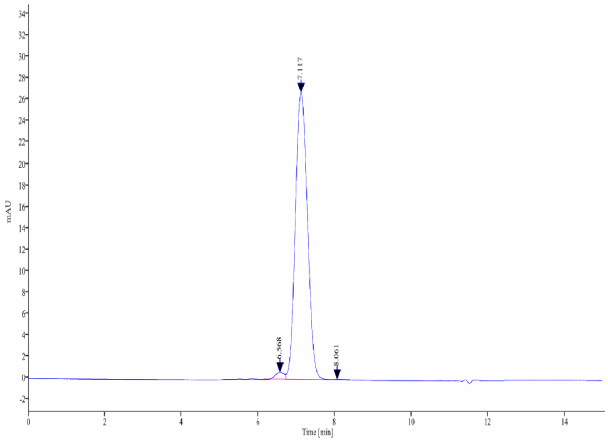
Biotinylated Human ITGAV&ITGB1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

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Assay Data



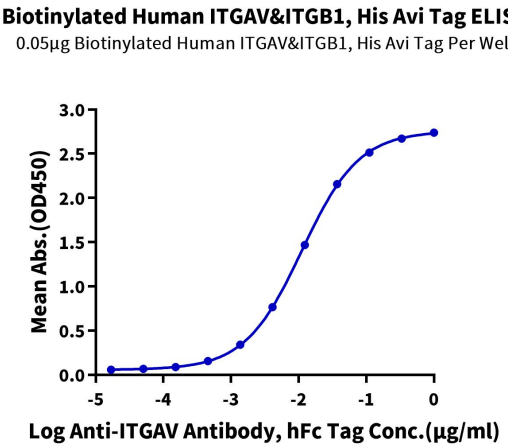
The purity of Biotinylated Human ITGAV&ITGB1 is greater than 90% as determined by SEC-HPLC.

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Assay Data

ELISA Data



Immobilized Biotinylated Human ITGAV&ITGB1, His Avi Tag at 0.5μg/ml (100μl/well) on the streptavidin precoated plate (5μg/ml). Dose response curve for Anti-ITGAV Antibody, hFc Tag with the EC50 of 11.2ng/ml determined by ELISA.

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