

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



Cat. No. ITG-HM4V1B

## Description

<b>Source</b>	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.
<b>Accession</b>	P06756-1(ITGAV)&P05556-1(ITGB1)
<b>Molecular Weight</b>	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.
<b>Endotoxin</b>	Less than 1 EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 90% as determined by HPLC

## Formulation and Storage

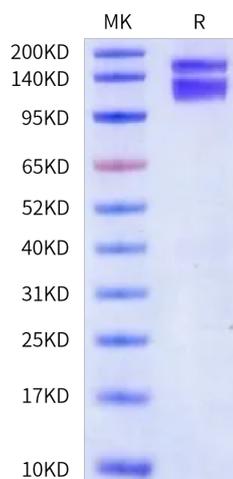
<b>Formulation</b>	Supplied as 0.22 µm filtered solution in PBS, 8% trehalose (pH 7.4).
<b>Storage</b>	Valid for 12 months from date of receipt when stored at -80°C. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## 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.  $\alpha$ V $\beta$ 1 is the major integrin on several different primary fibroblasts responsible for binding to TGF $\beta$ 1 LAP and for mediating activation of latent TGF $\beta$  by these cells.

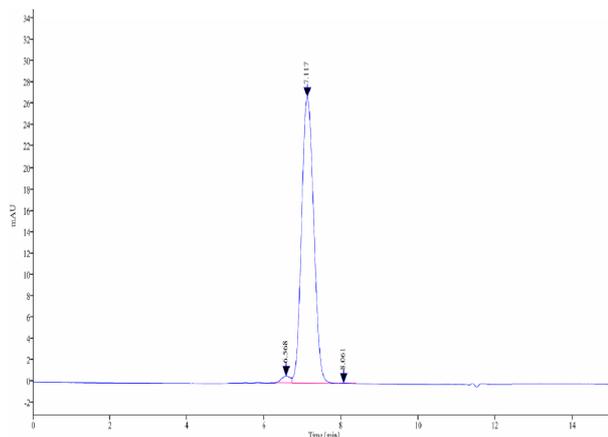
## Assay Data

### Bis-Tris PAGE



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

### SEC-HPLC



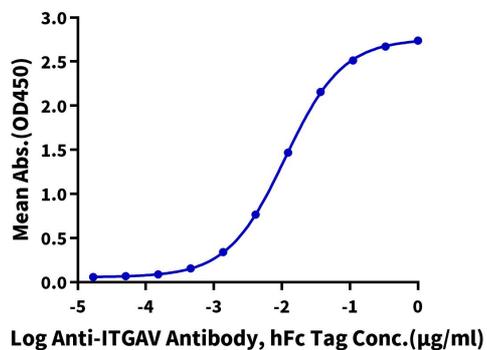
The purity of Biotinylated Human ITGAV&ITGB1 is greater than 90% as determined by SEC-HPLC.

Assay Data

ELISA Data

**Biotinylated Human ITGAV&ITGB1, His Avi Tag ELISA**

0.05µg Biotinylated Human ITGAV&ITGB1, His Avi Tag Per Well



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.