

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

Cat. No. ITG-HM4V1

## Description

<b>Source</b>	Recombinant Human Integrin alpha V beta 1 (ITGAV&ITGB1) Heterodimer Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Phe31-Val992 (ITGAV) acidic tail & 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 130-160 kDa (ITGAV) and 100-120 kDa (ITGB1) based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-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.  $\alpha$ 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

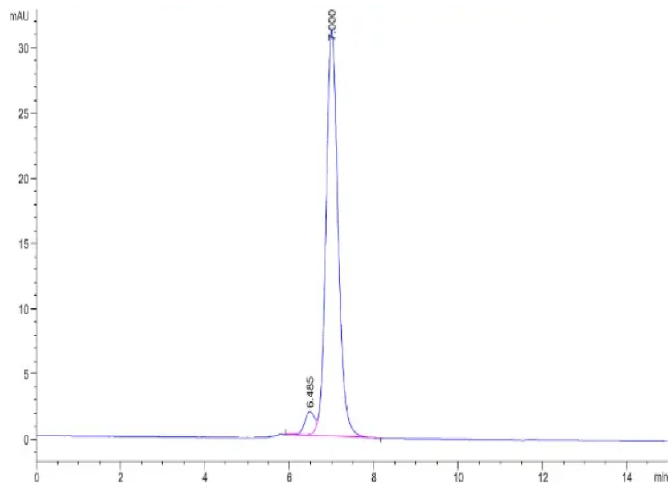
### Bis-Tris PAGE



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

### SEC-HPLC

Assay Data

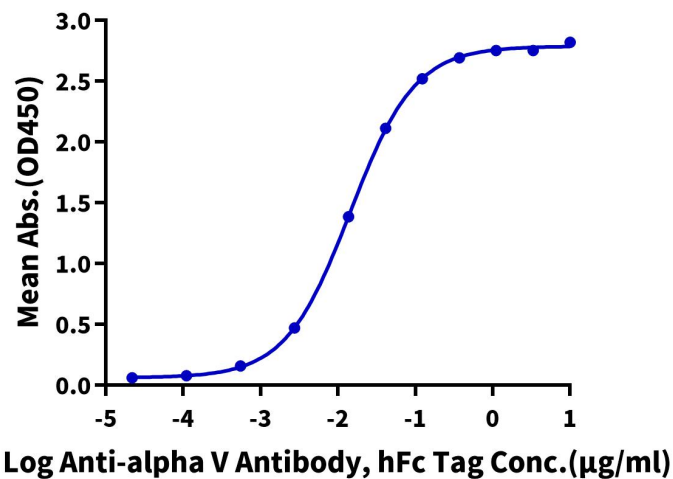


The purity of Human ITGAV&ITGB1 is greater than 95% as determined by SEC-HPLC.

ELISA Data

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

0.2µg Human ITGAV&ITGB1, His Tag Per Well



Immobilized Human ITGAV&ITGB1, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Anti-alpha V Antibody, hFc Tag with the EC50 of 14.4ng/ml determined by ELISA.