

Human Integrin alpha V beta 8 (ITGAV&ITGB8) Heterodimer Protein



Cat. No. ITG-HM4V8

Description	
Source	Recombinant Human Integrin alpha V beta 8 (ITGAV&ITGB8) Heterodimer Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus of ITGAV. It contains Phe31-Val992(ITGAV) acidic tail and Glu43-Arg684(ITGB8) basic tail.
Accession	P06756-1(ITGAV)&P26012-1(ITGB8)
Molecular Weight	The protein has a predicted MW of 114 kDa (ITGAV) and 76 kDa (ITGB8). Due to glycosylation, the protein migrates to 90-150 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 > 95% as determined by HPLC

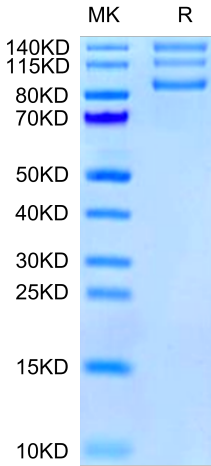
Formulation and Storage	
Formulation	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.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

Integrin αVβ8 is a heterodimeric cell surface receptor involved in various cellular processes, including cell adhesion, migration, and signaling. It is recognized for its unique role in activating TGF-β and has been implicated in immune responses and tissue homeostasis. Due to its distinctive structure and function, integrin αVβ8 is considered atypical among integrin family members.

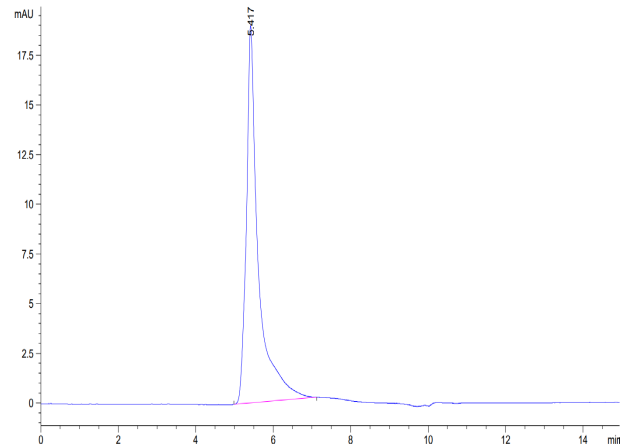
Assay Data

Bis-Tris PAGE



Human ITGAV&ITGB8 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

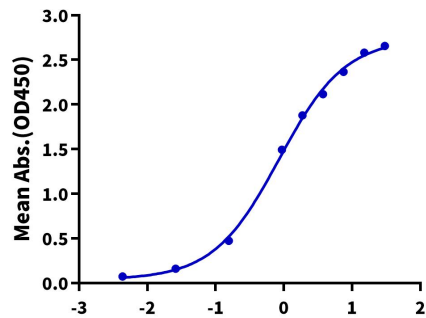


The purity of Human ITGAV&ITGB8 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

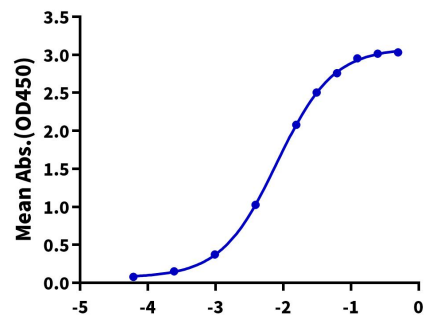
Human ITGAV&ITGB8, His Tag ELISA  
0.5µg Human ITGAV&ITGB8, His Tag Per Well



Immobilized Human ITGAV&ITGB8, His Tag at 5 µg/ml (100 µl/well) on the plate. Dose response curve for Biotinylated Human Latent TGF beta 1, His Tag with the EC50 of 0.85 µg/ml determined by ELISA (QC Test).

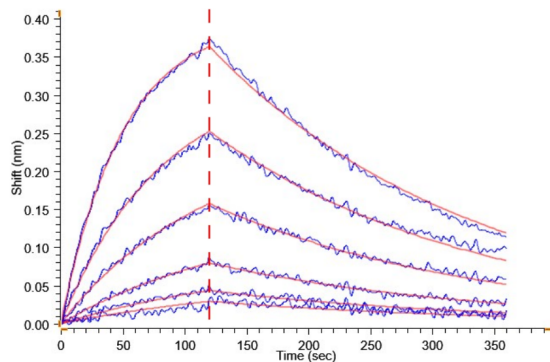
ELISA Data

Human ITGAV&ITGB8, His Tag ELISA  
0.2µg Human ITGAV&ITGB8, His Tag Per Well



Immobilized Human ITGAV&ITGB8, His Tag at 2µg/ml(100µl/well) on the plate. Dose response curve for Anti-alpha V Antibody, hFc Tag with the EC50 of 8.1ng/ml determined by ELISA.

BLI Data



Loaded Anti-alpha V Ab., hFc Tag on ProA-Biosensor can bind Biotinylated Human ITGAV&ITGB8, His-Avi Tag with an affinity constant of 0.61 µM as determined in BLI assay (Gator® Prime).