

Mouse Integrin alpha V beta 6 (ITGAV&ITGB6) Heterodimer Protein, His Tag&Tag Free (MALS verified)

Catalog # IT6-M52W9



Synonym

Integrin alpha V beta 6,ITGAV&ITGB6

Source

Mouse ITGAV&ITGB6 Heterodimer Protein, His Tag&Tag Free(IT6-M52W9) is expressed from human 293 cells (HEK293). It contains AA Phe 31 - Val 988 (ITGAV) & Gly 22 - Pro 708 (ITGB6) (Accession # [P43406-1](#) (ITGAV) & [Q9Z0T9-1](#) (ITGB6)).
Predicted N-terminus: Phe 31 (ITGAV) & Gly 22 (ITGB6)

Molecular Characterization

ITGAV (Phe 31 - Val 988) P43406-1	Acidic Tail	Poly-his
ITGB6 (Gly 22 - Pro 708) Q9Z0T9-1	Basic Tail	

Mouse Integrin alpha V beta 6 (ITGAV&ITGB6) Heterodimer Protein, His Tag&Tag Free, produced by co-expression of ITGAV and ITGB6, has a calculated MW of 112.5 kDa (ITGAV) and 80.2 kDa (ITGB6). Subunit ITGAV is fused with an acidic tail at the C-terminus and followed by a polyhistidine tag and subunit ITGB6 contains no tag but a basic tail at the C-terminus. The predicted N-terminus is Phe 31 (ITGAV) & Gly 22 (ITGB6). The non-reducing (NR) protein migrates as 135-145 kDa (ITGAV) & 80-90 kDa (ITGB6) respectively due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.
>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 150 mM NaCl, pH7.5 with trehalose as protectant.
Contact us for customized product form or formulation.

Reconstitution

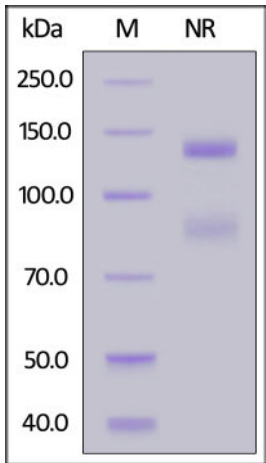
Please see Certificate of Analysis for specific instructions.
For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.
Please avoid repeated freeze-thaw cycles.
This product is stable after storage at:

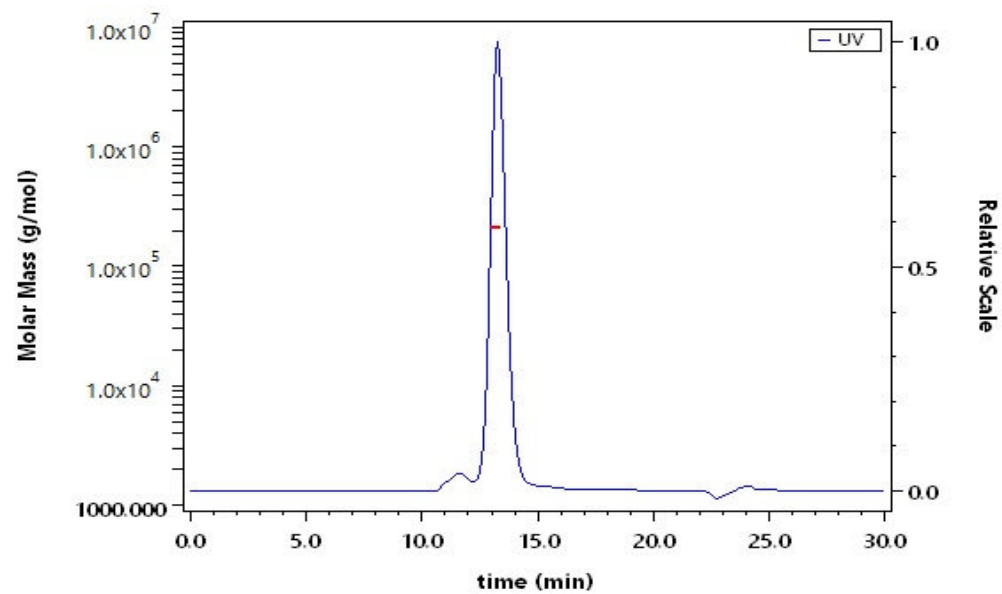
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Mouse ITGAV&ITGB6 Heterodimer Protein, His Tag&Tag Free on SDS-PAGE under non-reducing (NR) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

SEC-MALS



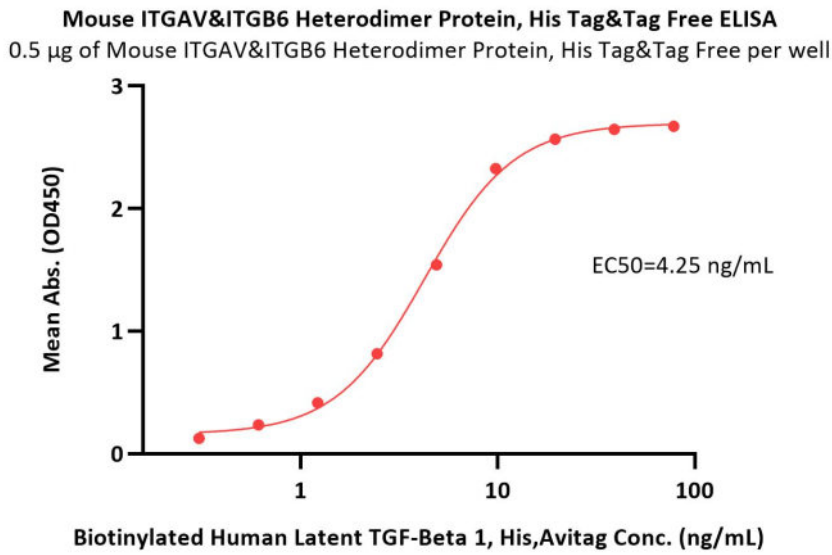
The purity of Mouse ITGAV&ITGB6 Heterodimer Protein, His Tag&Tag Free (Cat. No. IT6-M52W9) is more than 90% and the molecular weight of this protein is around 189-231 kDa verified by SEC-MALS.
[Report](#)

Bioactivity-ELISA



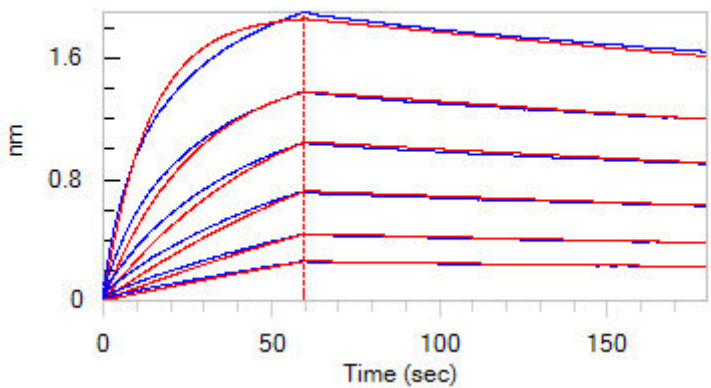
Mouse Integrin alpha V beta 6 (ITGAV&ITGB6) Heterodimer Protein, His Tag&Tag Free (MALS verified)

Catalog # IT6-M52W9



Immobilized Mouse ITGAV&ITGB6 Heterodimer Protein, His Tag&Tag Free (Cat. No. IT6-M52W9) at 5 µg/mL (100 µL/well) can bind Biotinylated Human Latent TGF-Beta 1, His,Avitag (Cat. No. TG1-H82Qb) with a linear range of 0.3-10 ng/mL (QC tested).

Bioactivity-BLI



Loaded Biotinylated Human Latent TGF-Beta 1, His,Avitag (Cat. No. TG1-H82Qb) on SA Biosensor, can bind Mouse ITGAV&ITGB6 Heterodimer Protein, His Tag&Tag Free (Cat. No. IT6-M52W9) with an affinity constant of 8.28 nM as determined in BLI assay (ForteBio Octet R8)(Routinely tested).

Background

Integrin alpha V beta 6 is a heterodimer of beta-6 associating with alpha-V. Integrin alpha-V beta-6 is a receptor for fibronectin and cytotactin. It recognizes the sequence R-G-D in its ligands. Internalisation of integrin alpha-V beta-6 via clathrin-mediated endocytosis promotes carcinoma cell invasion. Also, Integrin alpha-V beta-6 acts as a receptor for coxsackievirus A9 and coxsackievirus B1 as well as herpes simplex virus-1/HHV-1. Furthermore, it binds the TGF-beta latency-associated peptide (LAP) and activates TGF-beta 1 or TGF-beta 3 from large latent complexes. This activation requires interaction with LTBP-1 and fibronectin, and is enhanced by PAR-1.

