

Mouse Integrin alpha V beta 8 (ITGAV&ITGB8) Heterodimer Protein, His Tag&Tag Free (MALS verified)

Catalog # IT8-M52W6



BIOSYSTEMS
Acro

Synonym

Integrin alpha V beta 8,ITGAV&ITGB8

Source

Mouse ITGAV&ITGB8 Heterodimer Protein, His Tag&Tag Free(IT8-M52W6) is expressed from human 293 cells (HEK293). It contains AA Phe 31 - Val 988 (ITGAV) & Gly 22 - Leu 681 (ITGB8) (Accession # [P43406-1](#) (ITGAV) & [Q0VBD0-1](#) (ITGB8)).

Predicted N-terminus: Phe 31 (ITGAV) & Gly 22 (ITGB8)

Molecular Characterization

ITGAV (Phe 31 - Val 988) P43406-1	Acidic Tail	Poly-his
ITGB8 (Gly 22 - Leu 681) Q0VBD0-1	Basic Tail	

Mouse ITGAV&ITGB8 Heterodimer Protein, His Tag&Tag Free, produced by co-expression of ITGAV and ITGB8, has a calculated MW of 112.5 kDa (ITGAV) and 77.5 kDa (ITGB8). Subunit ITGAV is fused with an acidic tail at the C-terminus and followed by a polyhistidine tag and subunit ITGB8 contains no tag but a basic tail at the C-terminus. The non-reducing (NR) protein migrates as 130-150 kDa (ITGAV) and 80-90 kDa (ITGB8) respectively due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

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

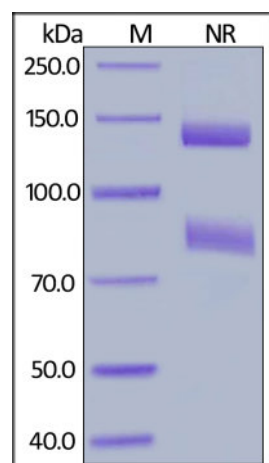
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

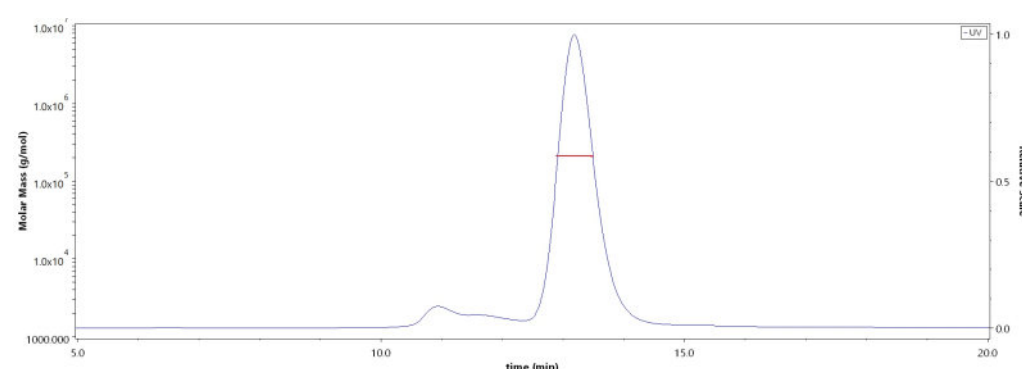
SDS-PAGE



Mouse ITGAV&ITGB8 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 95%.

Bioactivity-ELISA

SEC-MALS



The purity of Mouse ITGAV&ITGB8 Heterodimer Protein, His Tag&Tag Free (Cat. No. IT8-M52W6) is more than 85% and the molecular weight of this protein is around 189-231 kDa verified by SEC-MALS.

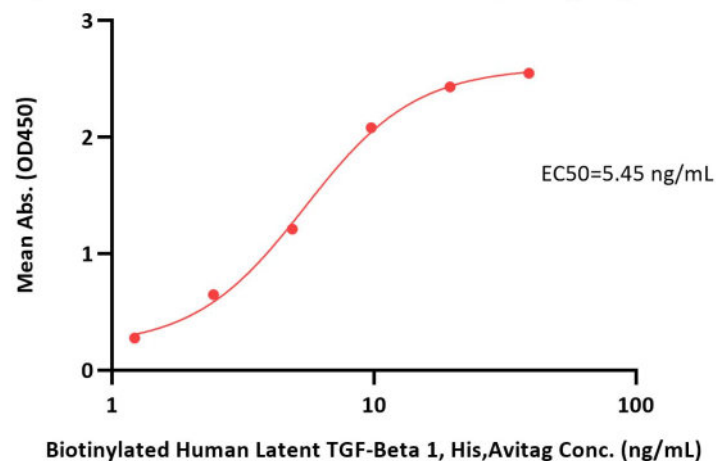
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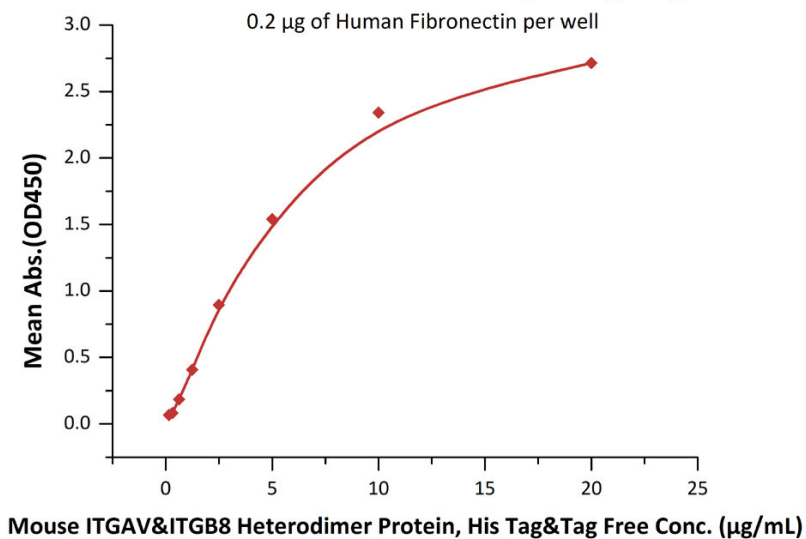


Mouse ITGAV&ITGB8 Heterodimer Protein, His Tag&Tag Free ELISA
0.5 µg of Mouse ITGAV&ITGB8 Heterodimer Protein, His Tag&Tag Free per well



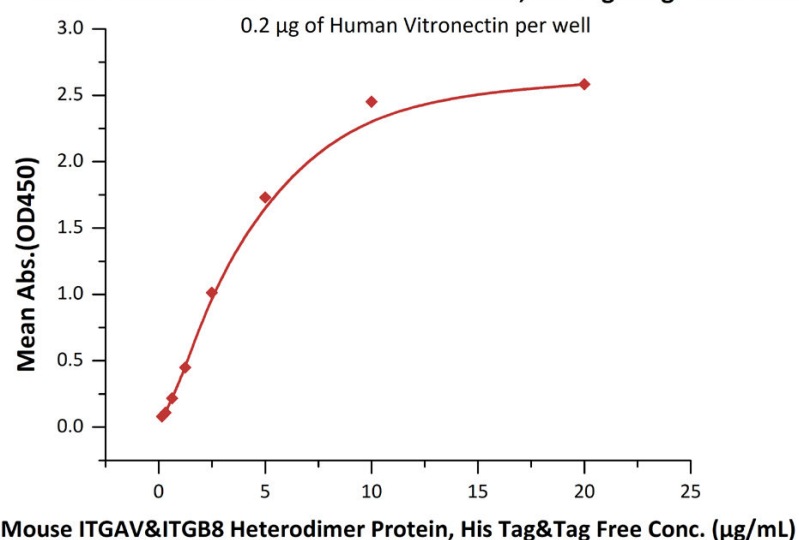
Immobilized Mouse ITGAV&ITGB8 Heterodimer Protein, His Tag&Tag Free (Cat. No. IT8-M52W6) at 5 µg/mL (100 µL/well) can bind Biotinylated Human Latent TGF-Beta 1, His,Avitag (Cat. No. TG1-H82Qb) with a linear range of 1-10 ng/mL (QC tested).

Mouse ITGAV&ITGB8 Heterodimer Protein, His Tag&Tag Free ELISA



Immobilized Human Fibronectin at 2 µg/mL (100 µL/well) can bind Mouse ITGAV&ITGB8 Heterodimer Protein, His Tag&Tag Free (Cat. No. IT8-M52W6) with a linear range of 0.156-5 µg/mL (Routinely tested).

Mouse ITGAV&ITGB8 Heterodimer Protein, His Tag&Tag Free ELISA



Immobilized Human Vitronectin at 2 µg/mL (100 µL/well) can bind Mouse ITGAV&ITGB8 Heterodimer Protein, His Tag&Tag Free (Cat. No. IT8-M52W6) with a linear range of 0.156-5 µg/mL (Routinely tested).

Background

Integrin alpha V beta 8 (ITGAV & ITGB8 or ITGAVB8) is expressed in yolk sac, placenta, brain perivascular astrocytes, Schwann cells, renal glomerular mesangial cells and pulmonary epithelial cells. Unlike other alpha V integrins, ITGAVB8 does not appear to assume different activation states, and the cytoplasmic tail does not connect to the cytoskeleton. It binds ligands containing an RGD motif, including vitronectin, fibrin and the latency associated peptide (LAP) of the latent TGF-beta complex. High affinity binding of alpha V beta 8 to LAP allows proteolytic cleavage by MT1-MMP, which releases active TGF-beta. This mechanism differs from that of alpha V beta 6, the other alpha V integrin which can activate TGF-beta from latency through non-proteolytic mechanisms. Downstream effects of TGF-beta activation include control of cell growth and associated vascularization.

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