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

Catalog # IT6-M82W9





## **Synonym**

Integrin alpha V beta 6,ITGAV&ITGB6

#### Source

Biotinylated Mouse ITGAV&ITGB6 Heterodimer Protein, His,Avitag&Tag Free(IT6-M82W9) is expressed from human 293 cells (HEK293). It contains AA Phe 31 - Val 988 & Gly 22 - Pro 708 (Accession # P43406-1 & Q9Z0T9-1). Predicted N-terminus: Phe 31 | Gly 22

## **Molecular Characterization**

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

Biotinylated Mouse ITGAV&ITGB6 Heterodimer Protein is produced by co-expression of ITGAV and ITGB6, has a calculated MW of 114.2 kDa (ITGAV) & 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 protein migrates as 80-90 kDa and 135-150 kDa under non-reducing (NR) condition (SDS-PAGE) due to glycosylation.

## Labeling

Biotinylation of this product is performed using Avitag<sup>TM</sup> technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

### **Protein Ratio**

Passed as determined by the HABA assay / binding ELISA.

# **Purity**

>95% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from 0.22  $\mu m$  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**

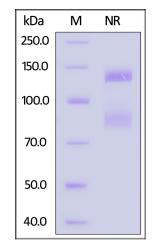
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

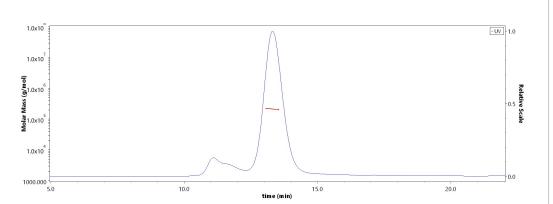
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## **SDS-PAGE**



Biotinylated Mouse ITGAV&ITGB6 Heterodimer Protein, His,Avitag&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%.

## **SEC-MALS**



The purity of Biotinylated Mouse ITGAV&ITGB6 Heterodimer Protein, His,Avitag&Tag Free (Cat. No. IT6-M82W9) is more than 80% and the molecular weight of this protein is around 191-233 kDa verified by SEC-MALS.

Report

# **Bioactivity-ELISA**



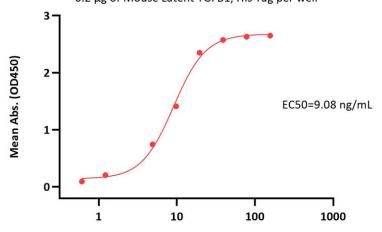
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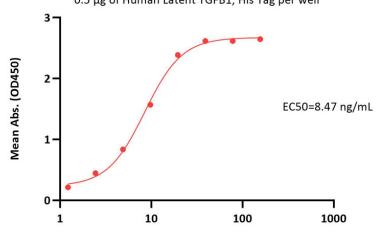
Biotinylated Mouse ITGAV&ITGB6 Heterodimer Protein, His,Avitag&Tag Free ELISA 0.2 µg of Mouse Latent TGFB1, His Tag per well



Biotinylated Mouse ITGAV&ITGB6 Heterodimer Protein, His, Avitag&Tag Free Conc. (ng/mL)

Immobilized Mouse Latent TGFB1, His Tag (Cat. No. TG1-M5245) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Mouse ITGAV&ITGB6 Heterodimer Protein, His,Avitag&Tag Free (Cat. No. IT6-M82W9) with a linear range of 1-20 ng/mL (QC tested).

Biotinylated Mouse ITGAV&ITGB6 Heterodimer Protein, His, Avitag&Tag Free ELISA 0.5 μg of Human Latent TGFB1, His Tag per well



Biotinylated Mouse ITGAV&ITGB6 Heterodimer Protein, His, Avitag&Tag Free Conc. (ng/mL)

Immobilized Human Latent TGFB1, His Tag (Cat. No. TG1-H524x) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Mouse ITGAV&ITGB6 Heterodimer Protein, His,Avitag&Tag Free (Cat. No. IT6-M82W9) with a linear range of 1-20 ng/mL (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.

