

Biotinylated Mouse Integrin alpha V beta 5 (ITGAV&ITGB5) Heterodimer Protein, His,Avitag™&Tag Free

Catalog # IT5-M82W9



Synonyms

Integrin alpha V beta 5, ITGAV&ITGB5

Source

Biotinylated Mouse ITGAV&ITGB5 Heterodimer Protein, His,Avitag&Tag Free (IT5-M82W9) is expressed from human 293 cells (HEK293). It contains AA Phe 31 - Val 988 & Gly 24 - Asn 719 (Accession # [P43406-1](#) & [O70309-1](#)).

Predicted N-terminus: Phe 31 & Gly 24

Molecular Characterization

ITGAV (Phe 31 - Val 988) P43406-1	Acidic Tail	Poly-his	Avi
ITGB5 (Gly 24 - Asn 719) O70309-1	Basic Tail		

Biotinylated Mouse ITGAV&ITGB5 Heterodimer Protein is produced by co-expression of ITGAV and ITGB5, has a calculated MW of 114.2 kDa (ITGAV) & 77.5 kDa (ITGB5). Subunit ITGAV is fused with an acidic tail at the C-terminus and followed by a polyhistidine tag and subunit ITGB5 contains no tag but a basic tail at the C-terminus.The protein migrates as 80-90 kDa (ITGB5) and 125-145 kDa (ITGAV) under non-reducing (NR) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ 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 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.

Shipping and Storage

This product is shipped at ambient temperature.

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

Please avoid repeated freeze-thaw cycles.

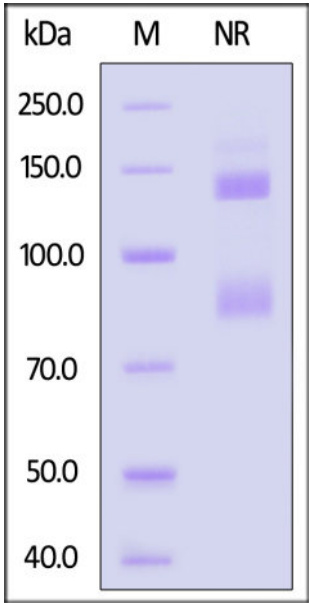
This product is stable after storage at:

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

ACRO Quality Management System

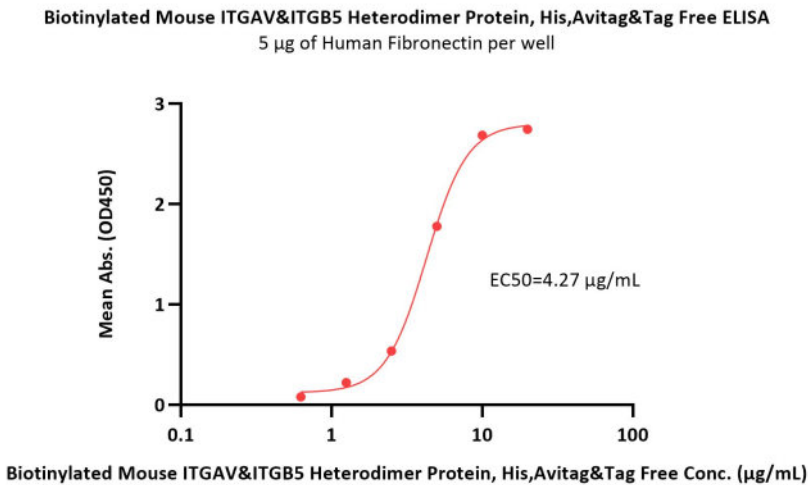
- [QMS\(ISO, GMP\)](#).
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



Biotinylated Mouse ITGAV&ITGB5 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%.

Bioactivity-ELISA



Immobilized Human Fibronectin at 50 µg/mL (100 µL/well) can bind Biotinylated Mouse ITGAV&ITGB5 Heterodimer Protein, His,Avitag&Tag Free (Cat. No. IT5-M82W9) with a linear range of 0.625-10 µg/mL (Routinely tested).

Background

Integrin alpha V beta 5 (ITGAV & ITGB5) is expressed on a wide variety of cell types including keratinocytes, fibroblasts, adhesive monocytes, embryonic stem cells, and select endothelium and epithelium. ITGAV & ITGB5 binds ligands containing an RGD motif, notably vitronectin. Growth factors that increase PKC activity, such as VEGF or TGF alpha, promote ITGAV & ITGB5-mediated angiogenesis while alpha V beta 3, which may be expressed in the same cell, responds to FGF-basic and TNF alpha. An inhibitor of both down regulates tumor angiogenesis. During lung inflammation, up regulation of ITGAV & ITGB5 on myofibroblasts or infiltrating lymphocytes may contribute to fibrosis by freeing TGF beta from latency.



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