

Synonym

Integrin alpha V beta 6, ITGAV&ITGB6

Source

Rat ITGAV&ITGB6 Heterodimer, His Tag&Tag Free (IT6-R52E6) is expressed from human 293 cells (HEK293). It contains AA Phe 31 - Pro 988 (ITGAV) & Gly 22 - Pro 708 (ITGB6) (Accession # [NP_001385621.1](#) (ITGAV) & [Q6AYF4](#) (ITGB6)).
Predicted N-terminus: Phe 31 & Gly 22

Molecular Characterization

ITGAM (Phe 31 - Pro 988) NP_001385621.1	Acidic Tail	Poly-his
ITGB6 (Gly 22 - Pro 708) Q6AYF4	Basic Tail	

Other Tags and Version Biotin & Other Labeled Version

Rat ITGAV&ITGB6 Heterodimer, His Tag&Tag Free, produced by co-expression of ITGAV and ITGB6, has a calculated MW of 112.3 kDa (ITGAV) & 80.1 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 125-145 kDa (ITGAV) and 70-85 kDa (ITGB6) when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under non-reducing (NR) condition (SDS-PAGE) due to glycosylation.

Endotoxin

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

Purity

>90% 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

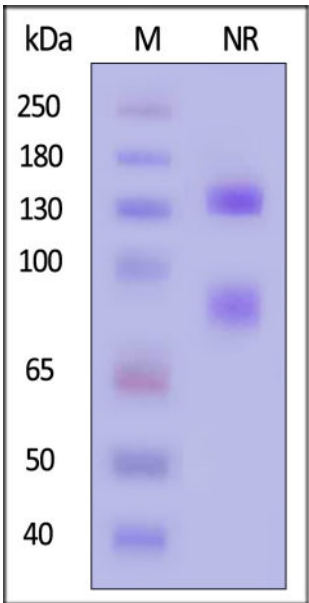
For long term storage, the product should be stored at lyophilized state at -20°C or lower.
Please avoid repeated freeze-thaw cycles.
This product is stable after storage at:

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

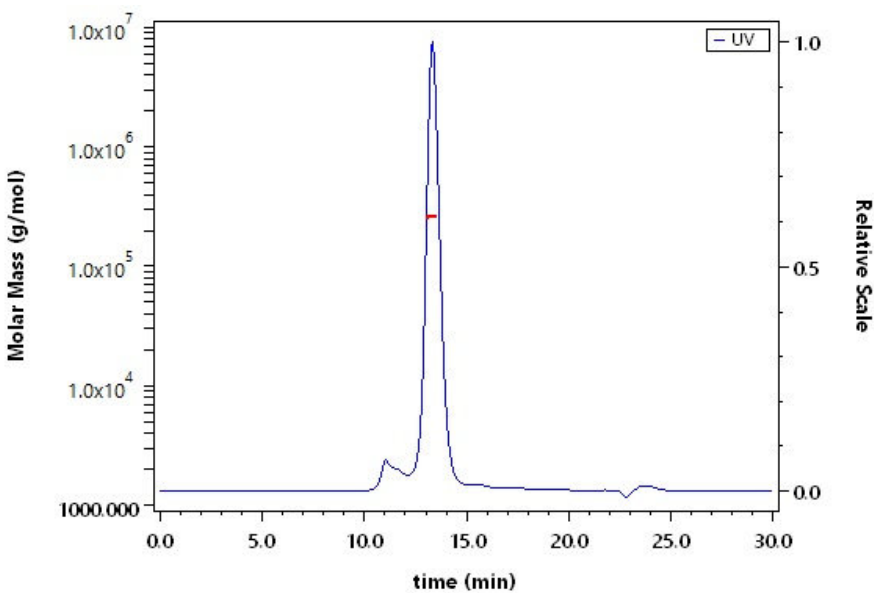
ACRO Quality Management System

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

SDS-PAGE



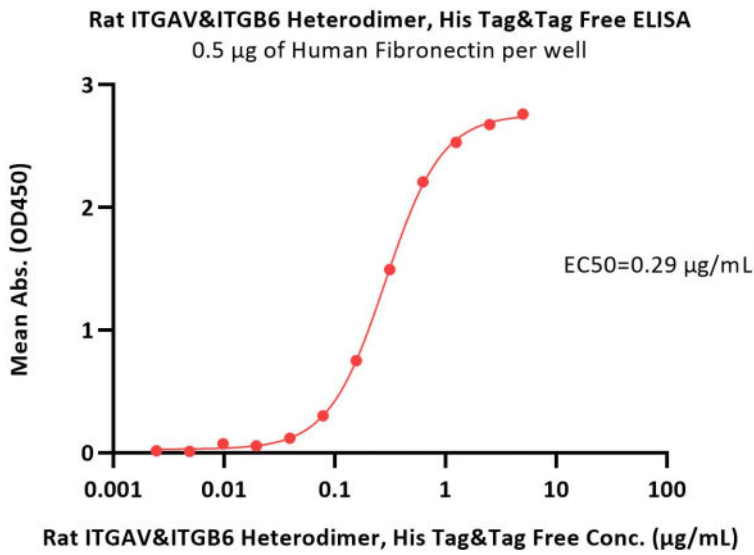
SEC-MALS



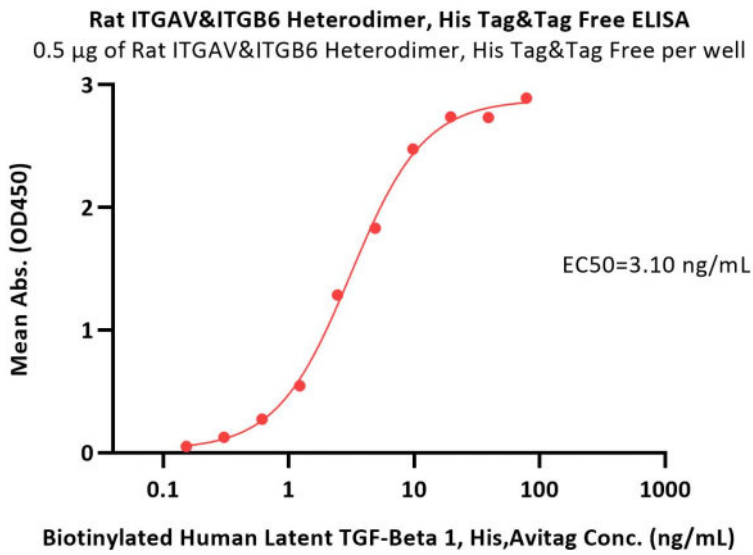
Rat ITGAV&ITGB6 Heterodimer, His Tag&Tag Free on SDS-PAGE under non-reducing (NR) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

The purity of Rat ITGAV&ITGB6 Heterodimer, His Tag&Tag Free (Cat. No. IT6-R52E6) is more than 85% and the molecular weight of this protein is around 242-272 kDa verified by SEC-MALS.

Bioactivity-ELISA



Immobilized Human Fibronectin at 5 µg/mL (100 µL/well) can bind Rat ITGAV&ITGB6 Heterodimer, His Tag&Tag Free (Cat. No. IT6-R52E6) with a linear range of 0.02-0.625 µg/mL (QC tested).



Immobilized Rat ITGAV&ITGB6 Heterodimer, His Tag&Tag Free (Cat. No. IT6-R52E6) 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 (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.

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