



### Synonym

Integrin alpha 3 beta 1,ITGA3&ITGB1

### Source

Rat ITGA3 & ITGB1 Heterodimer Protein, His Tag&Tag Free(IT1-R53Wb) is expressed from CHO cells. It contains AA Phe 33 - Glu 992 & Gln 21 - Asp 729 (Accession # [I4DUB5](#) & [P49134](#) ).

Predicted N-terminus: Phe 33 & Gln 21

### Molecular Characterization

ITGA3 (Phe 33 - Glu 992) I4DUB5	Acidic Tail	Poly-his
ITGB1 (Gln 21 - Asp 729) P49134	Basic Tail	

Rat ITGA3 & ITGB1 Heterodimer Protein, His Tag&Tag Free, has a calculated MW of 113.4 kDa (ITGA3) & 83.7 kDa (ITGB1). Subunit ITGA3 is fused with an acidic tail at the C-terminus and followed by a polyhistidine tag and subunit ITGB1 contains no tag but a basic tail at the C-terminus. The non-reducing (NR) protein migrates as 125-150 kDa (ITGA3) and 100-110 kDa (ITGB1) respectively due to glycosylation.

### Endotoxin

Less than 1.0 EU per µg by the LAL 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

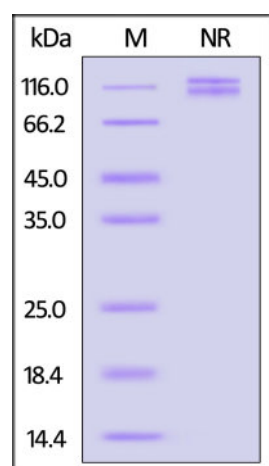
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*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.

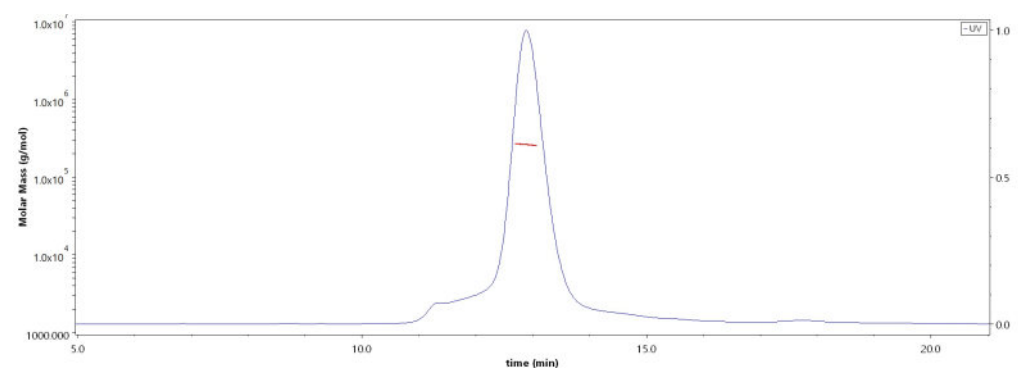
### SDS-PAGE



Rat ITGA3 & ITGB1 Heterodimer Protein, His Tag&Tag Free on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

### Bioactivity-ELISA

### SEC-MALS



The purity of Rat ITGA3 & ITGB1 Heterodimer Protein, His Tag&Tag Free (Cat. No. IT1-R53Wb) is more than 85% and the molecular weight of this protein is around 245-285 kDa verified by SEC-MALS.

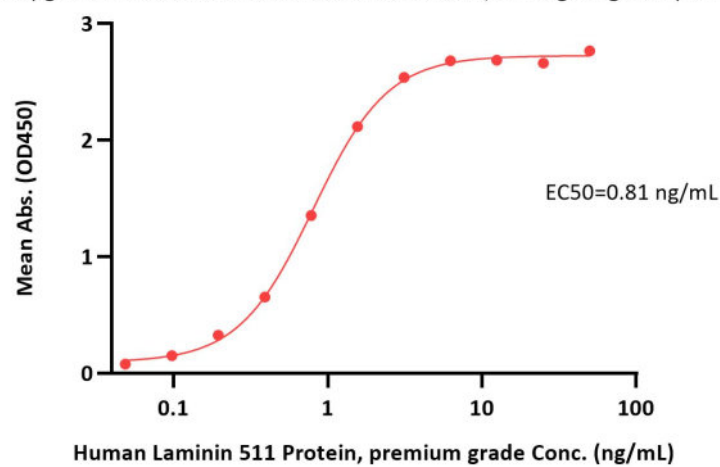
[Report](#)

Discounts, Gifts,  
and more!





Rat ITGA3 & ITGB1 Heterodimer Protein, His Tag&Tag Free ELISA  
0.5 µg of Rat ITGA3 & ITGB1 Heterodimer Protein, His Tag&Tag Free per well



Immobilized Rat ITGA3 & ITGB1 Heterodimer Protein, His Tag&Tag Free (Cat. No. IT1-R53Wb) at 5 µg/mL (100 µL/well) can bind Human Laminin 511 Protein, premium grade (Cat. No. LA8-H5283) with a linear range of 0.1-2 ng/mL (QC tested).

## Background

Integrin alpha-3/beta-1 is a receptor for fibronectin, laminin, collagen, epiligrin, thrombospondin and CSPG4. Integrin alpha-3/beta-1 provides a docking site for FAP (seprase) at invadopodia plasma membranes in a collagen-dependent manner and hence may participate in the adhesion, formation of invadopodia and matrix degradation processes, promoting cell invasion. Alpha-3/beta-1 may mediate with LGALS3 the stimulation by CSPG4 of endothelial cells migration.

## Clinical and Translational Updates

Discounts, Gifts,  
and more!

