Human Integrin alpha 6 beta 4 Protein, His Tag&Tag Free (MALS verified)

Catalog # IN4-H52W3

Synonym

Integrin alpha 6 beta 4, ITGA6&ITGB4

Source

Human Integrin alpha 6 beta 4 Protein, His Tag&Tag Free(IN4-H52W3) is expressed from human 293 cells (HEK293). It contains AA Phe 24 - Gly 1012 | Asn 28 - Ser 710 (Accession # P23229-2 & P16144-2).
Predicted N-terminus: Phe 24 | Asn 28

Molecular Characterization

Human Integrin alpha 6 beta 4 Protein, His Tag&Tag Free, produced by co-expression of ITGA6 and ITGB4, has a calculated MW of 116.8 kDa (ITGA6) and 81.8 kDa (ITGB4). Subunit ITGA6 is fused with an acidic tail at the C-terminus and followed by a polyhistidine tag and subunit ITGB4 contains no tag but a basic tail at the C-terminus. The non-reducing (NR) protein migrates as 130-140 kDa (ITGA6) and 75-85 kDa (ITGB4) respectively due to glycosylation.

Endotoxin

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

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 150 mM NaCl, 0.2 M Arginine, 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

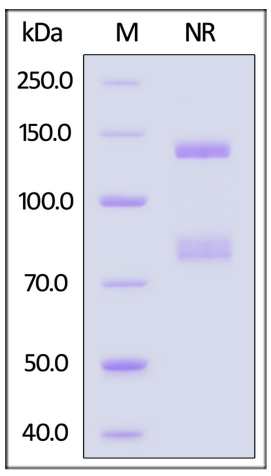
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

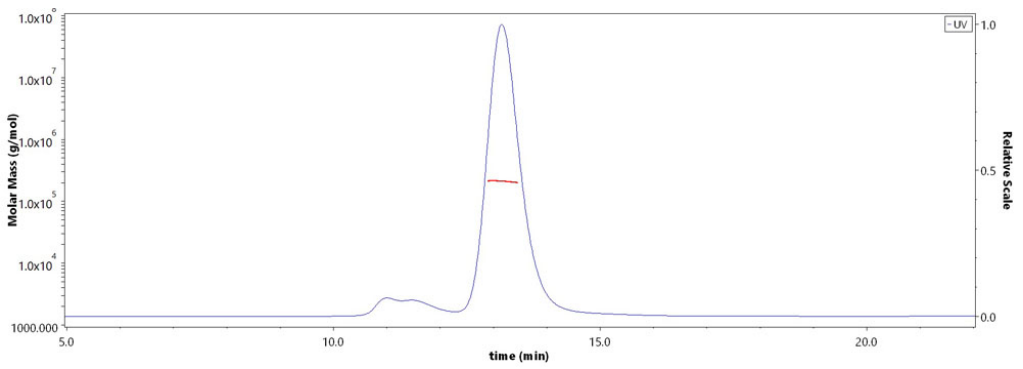
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human Integrin alpha 6 beta 4 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%.

SEC-MALS

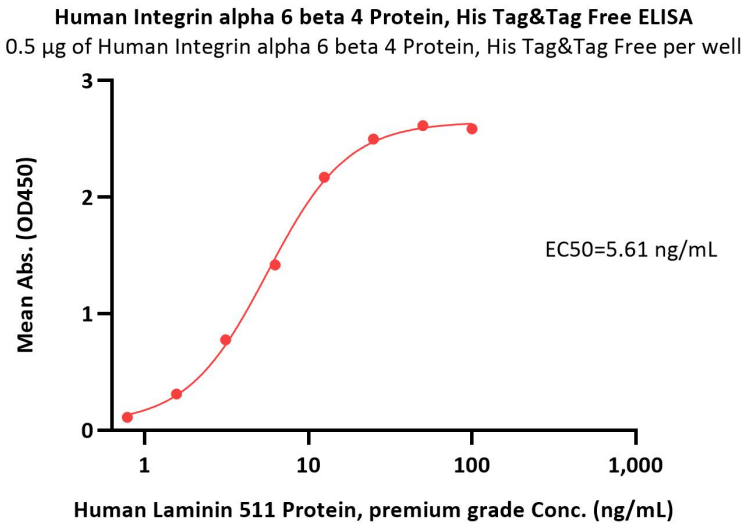


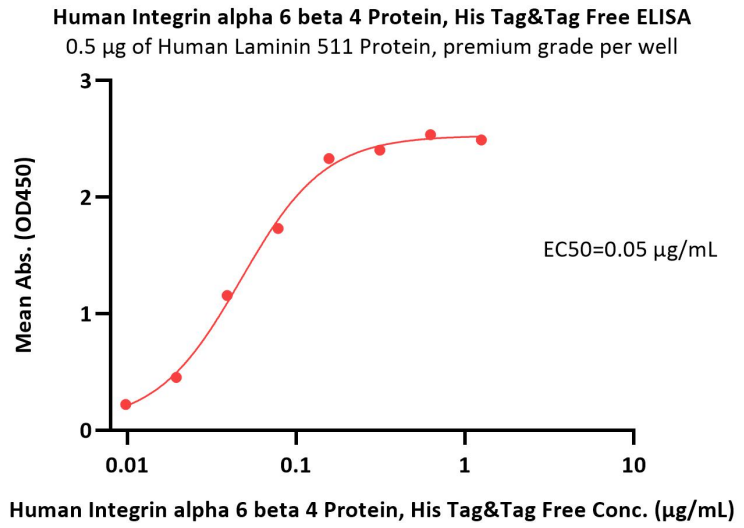
The purity of Human Integrin alpha 6 beta 4 Protein, His Tag&Tag Free (Cat. No. IN4-H52W3) is more than 90% and the molecular weight of this protein is around 195-220 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA

Human Integrin alpha 6 beta 4 Protein, His Tag&Tag Free (MALS verified)

Catalog # IN4-H52W3





Immobilized Human Integrin alpha 6 beta 4 Protein, His Tag&Tag Free (Cat. No. IN4-H52W3) at 5 μg/mL (100 μL/well) can bind Human Laminin 511 Protein, premium grade (Cat. No. LA8-H5283) with a linear range of 0.8-13 ng/mL (QC tested).

Immobilized Human Laminin 511 Protein, premium grade (Cat. No. LA8-H5283) at 5 μg/mL (100 μL/well) can bind Human Integrin alpha 6 beta 4 Protein, His Tag&Tag Free (Cat. No. IN4-H52W3) with a linear range of 0.01-0.156 μg/mL (Routinely tested).

Background

Human integrin alpha(10)I domain as a recombinant protein to reveal its ligand binding specificity. In general, alpha(10)I did recognize collagen types I-VI and laminin-1 in a Mg(2+)-dependent manner, whereas its binding to tenascin was only slightly better than to albumin. Alpha 10 beta 1 is a known collagen-binding I domain integrin, in addition to α1β1, α2β1 and α11β1. GROGER found in the N-terminal domain of collagens I and III, is only weakly recognised by α10β1, an important collagen receptor on chondrocytes, contrasting with the other collagen-binding integrins.