Human Integrin alpha 11 beta 1 (ITGA11&ITGB1) Heterodimer Protein, His Tag&Tag Free

Catalog # IT1-H52W3



Synonym

Integrin alpha 11 beta 1,ITGA11&ITGB1

Source

Human ITGA11&ITGB1 Heterodimer Protein, His Tag&Tag Free(IT1-H52W3) is expressed from human 293 cells (HEK293). It contains AA Phe 23 - Pro 1141 (ITGA11) & Gln 21-Asp 728 (ITGB1) (Accession # Q9UKX5-1 (L524R) (ITGA11) & P05556-1 (ITGB1)).

Predicted N-terminus: Phe 23 (ITGA11) & Gln 21 (ITGB1)

Molecular Characterization



Human ITGA11&ITGB1 Heterodimer Protein, His Tag&Tag Free, produced by co-expression of ITGA11 and ITGB1, has a calculated MW of 131.6 kDa (ITGA11) and 82.7 kDa (ITGB1). Subunit ITGA11 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 protein migrates as >200 kDa 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.

Purity

>90% 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

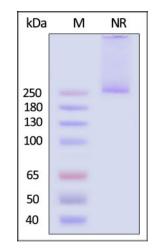
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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



Human ITGA11&ITGB1 Heterodimer 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 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

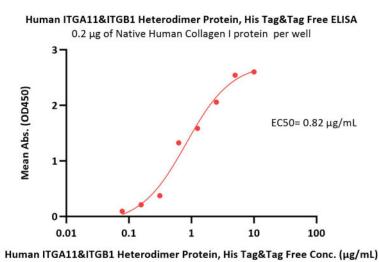
Bioactivity-ELISA



Human Integrin alpha 11 beta 1 (ITGA11&ITGB1) Heterodimer Protein, His Tag&Tag Free







Immobilized Human Collagen I protein at 2 μ g/mL (100 μ L/well) can bind Human ITGA11&ITGB1 Heterodimer Protein, His Tag&Tag Free (Cat. No. IT1-H52W3) with a linear range of 0.078-1.25 μ g/mL (QC tested).

Background

Integrin alpha 11 beta 1 is a receptor for collagen. The alpha11 cDNA encodes a mature protein with a large 1120-residue extracellular domain that contains an I-domain of 207 residues and is linked by a transmembrane domain to a short cytoplasmic domain of 24 amino acids. The deduced alpha11 protein shows the typical structural features of integrin alpha-subunits and is similar to a distinct group of alpha-subunits from collagen-binding integrins.

Clinical and Translational Updates

