

Synonym

Integrin alpha 11 beta 1,ITGA11&ITGB1

Source

Cynomolgus ITGA1&ITGB1 Heterodimer Protein, His Tag&Tag Free(IT1-C53W3) is expressed from CHO cells. It contains AA Phe 23 - Pro 1131 & Gln 21 – Asp 728 (Accession # [A0A2K5U8X4-1](#) & [XP_005564990.1](#)).

Predicted N-terminus: Phe 23 & Gln 21

Molecular Characterization

ITGA1 (Phe 23 - Pro 1131) A0A2K5U8X4-1	Acidic Tail	Poly-his
ITGB1 (Gln 21 – Asp 728) XP_005564990.1	Basic Tail	

Cynomolgus ITGA1&ITGB1 Heterodimer Protein, His Tag&Tag Free, produced by co-expression of ITGA1 and ITGB1, has a calculated MW of 131.4 kDa & 83.6 kDa. The protein migrates as 105-115 kDa and >170 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 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.

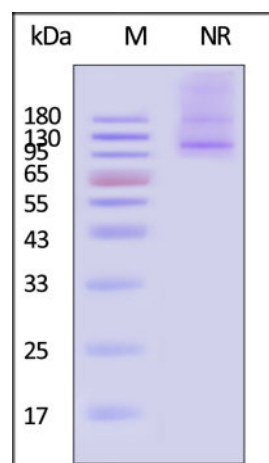
Storage

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

Please avoid repeated freeze-thaw cycles.

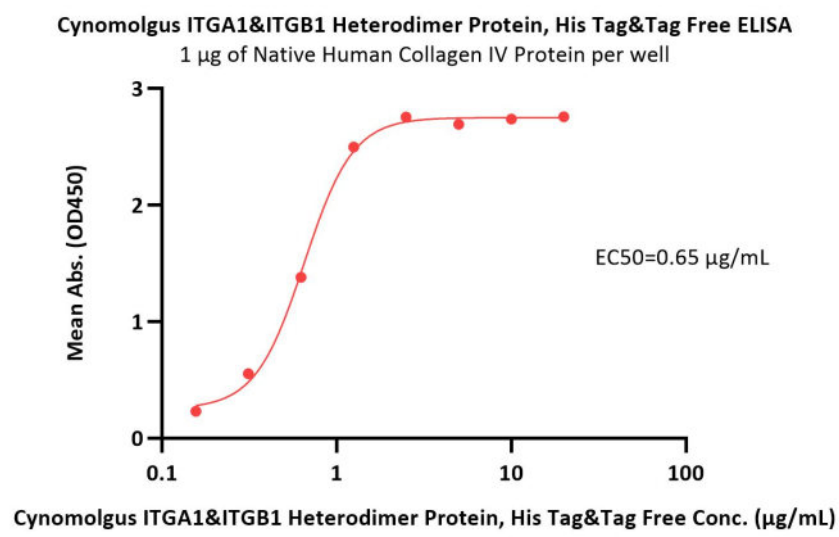
This product is stable after storage at:

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

SDS-PAGE

Cynomolgus ITGA1&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 [Star Ribbon Pre-stained Protein Marker](#)).

Bioactivity-ELISA



Immobilized Native Human Collagen IV Protein at 10 µg/mL (100 µL/well) can bind Cynomolgus ITGA1&ITGB1 Heterodimer Protein, His Tag&Tag Free (Cat. No. IT1-C53W3) with a linear range of 0.156-1.25 µg/mL (QC tested).

Background

Integrin alpha-1/beta-1 is a receptor for laminin and collagen. The Integrin alpha-1/beta-1 and Integrin alpha-2/beta-1 integrins provide critical support for vascular endothelial growth factor signaling, endothelial cell migration, and tumor angiogenesis. It recognizes the proline-hydroxylated sequence G-F-P-G-E-R in collagen. Involved in anchorage-dependent, negative regulation of EGF-stimulated cell growth.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.