## Cynomolgus Integrin alpha 11 beta 1 (ITGA1&ITGB1) Heterodimer Protein, His Tag&Tag Free

Catalog # IT1-C53W3



### **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 # <u>A0A2K5U8X4-1</u> & <u>XP\_005564990.1</u>).

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 (ITGA1) and 83.6 kDa (ITGB1). Subunit ITGA1 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 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  $\mu g$  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

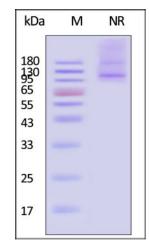
For long term storage, the product should be stored at lyophilized state at -20 $^{\circ}$ C or lower.

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 <u>Star Ribbon Pre-stained Protein Marker</u>).

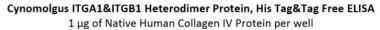
**Bioactivity-ELISA** 

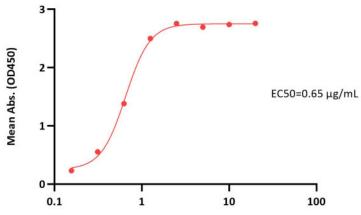


## Cynomolgus Integrin alpha 11 beta 1 (ITGA1&ITGB1) Heterodimer Protein, His Tag&Tag Free









Cynomolgus ITGA1&ITGB1 Heterodimer Protein, His Tag&Tag Free Conc. (µg/mL)

Immobilized Native Human Collagen IV Protein at 10  $\mu$ g/mL (100  $\mu$ L/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  $\mu$ g/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**

