### Cynomolgus Integrin alpha E beta 7 (ITGAE&ITGB7) Heterodimer Protein, His Tag&Tag Free

Catalog # IT7-C52W3



### **Synonym**

Integrin alpha E beta 7,ITGAE&ITGB7

#### Source

Cynomolgus ITGAE&ITGB7 Heterodimer Protein, His Tag&Tag Free(IT7-C52W3) is expressed from human 293 cells (HEK293). It contains AA Phe 38 - Ser 1142 & Glu 20 - His 723 (Accession # XP 045231543.1 & XP 005571028.2).

Predicted N-terminus: Phe 38 & Glu 20

### **Molecular Characterization**

ITGAE (Phe 38 - Ser 1142) XP_045231543.1	Acidic Tail	His
ITGB7 (Glu 20 - His 723) XP_005571028.2	Basic Tail	

Cynomolgus ITGAE&ITGB7 Heterodimer Protein, His Tag&Tag Free, produced by co-expression of ITGAE and ITGB7, has a calculated MW of 128.3 kDa (ITGAE) and 81.6 kDa (ITGB7). The protein migrates as 95-110 kDa and 140-160 kDa when calibrated against <a href="Star Ribbon Pre-stained Protein Marker">Star Ribbon Pre-stained Protein Marker</a> 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**

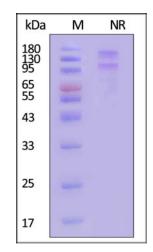
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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



Cynomolgus ITGAE&ITGB7 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** 

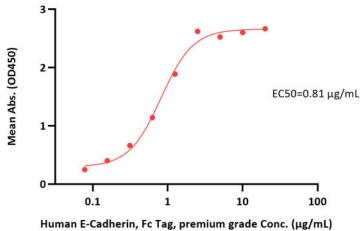


# Cynomolgus Integrin alpha E beta 7 (ITGAE&ITGB7) Heterodimer Protein, His Tag&Tag Free





Cynomolgus ITGAE&ITGB7 Heterodimer Protein, His Tag&Tag Free ELISA 0.5  $\mu$ g of Cynomolgus ITGAE&ITGB7 Heterodimer Protein, His Tag&Tag Free per well



Immobilized Cynomolgus ITGAE&ITGB7 Heterodimer Protein, His Tag&Tag Free (Cat. No. IT7-C52W3) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Human E-Cadherin, Fc Tag, premium grade (Cat. No. ECD-H5250) with a linear range of 0.078-1.25  $\mu$ g/mL (QC tested).

### Background

Integrin alpha E beta 7 consist of two major subunits: Integrin alpha E (ITGAE) also known as CD103 (cluster of differentiation 103) and Integrin beta-7 is an integrin protein that in humans is encoded by the ITGB7 gene. Integrin alpha E beta 7 (CD103) is expressed mainly by cells of the T lymphocyte lineage within mucosal tissues. This is a strikingly narrow pattern of expression compared with that of other integrins. Lymphocytes expressing alpha E beta 7 are abundant in the gut and comprise a major part of the total T cell complement of the body.

The effectiveness of lung transplantation is marred by the relatively high incidence of rejection. The lung normally contains a large population of lymphocytes in contact with the airway epithelium, a proportion of which expresses the mucosal integrin, alpha(E)(CD103)beta(7). This integrin is not a homing receptor, but is thought to retain lymphocytes at the epithelial surface.

# **Clinical and Translational Updates**

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

