

# Human Integrin alpha M beta 2 (ITGAM&ITGB2) Heterodimer Protein

Cat. No. ITG-HM1MB

## Description

<b>Source</b>	Recombinant Human Integrin alpha M beta 2 (ITGAM&ITGB2) Heterodimer Protein is expressed from HEK293 with His tag at the C-Terminus It contains Phe17-Asn1104 (ITGAM) acidic tail and Gln23-Asn700 (ITGB2) basic tail.
<b>Accession</b>	P11215-1(ITGAM)&P05107-1(ITGB2)
<b>Molecular Weight</b>	The protein has a predicted MW of 126.10 kDa (ITGAM) and 79.50 kDa (ITGB2). Due to glycosylation, the protein migrates to 140-160 kDa (ITGAM) and 90-100 kDa (ITGB2) based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1 EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE

## Formulation and Storage

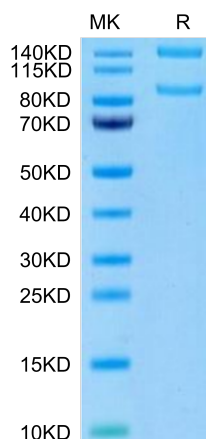
<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Integrin  $\alpha M\beta 2$ , also called Mac-1 or complement receptor-3 (CR3), is a heterodimer expressed on monocytes. It functions as both an adhesion molecule mediating the diapedesis of leukocytes across the endothelium and a receptor for the iC3b fragment of complement responsible for phagocytic/degranulation responses to microorganisms[1]. Active  $\alpha M\beta 2$  binds iC3b, coagulation proteins fibrinogen, plasminogen and factor X, extracellular matrix (ECM) proteins fibronectin, laminin and collagen, and cell surface ICAMs, myelin basic protein and DCSIGN[2].

## Assay Data

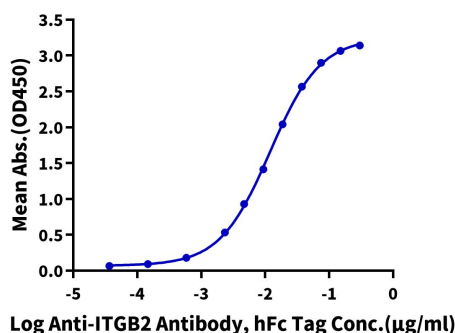
### Bis-Tris PAGE



Human ITGAM&ITGB2 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### ELISA Data

**Human ITGAM&ITGB2, His Tag ELISA**  
0.2µg Human ITGAM&ITGB2, His Tag Per Well



Immobilized Human ITGAM&ITGB2, His Tag at 2 µg/ml (100 µl/well) on the plate. Dose response curve for Anti-ITGB2 Antibody, hFc Tag with the EC50 of 11.9 ng/ml determined by ELISA (QC Test).