

## HUMAN ITGA2 AND ITGB1 HETERODIMER PROTEIN, HIS TAG AND HFC TAG

**Cat.#:** 11507

**Product Name:** Human ITGA2 And ITGB1 Heterodimer Protein

**Size:** 10 µg, 50 µg and 100 µg

**Synonyms:** Integrin alpha 2 beta 1;TGA2 and ITGB1

**Target:** ITGA2 and ITGB1

**UNIPROT ID:** P05556

**Description:** Recombinant human ITGA2 protein with C-terminal 6xHis tag and human ITGB1 protein with C-terminal human Fc tag

**Background:** Integrin alpha 2 beta 1 is one of twelve integrin family adhesion receptors that share the beta 1 subunit. It is a receptor for laminin, collagen, collagen C-propeptides, fibronectin and E-cadherin. It recognizes the proline-hydroxylated sequence G-F-P-G-E-R in collagen. It is responsible for adhesion of platelets and other cells to collagens, modulation of collagen and collagenase gene expression, force generation and organization of newly synthesized extracellular matrix. Integrin ITGA2:ITGB1 acts as a receptor for Human rotavirus A and Human echoviruses 1 and 8. DGEA inhibited rotavirus binding to alpha2beta1 and infectivity. In a novel process, integrin-using viruses bind the alpha2 I domain of alpha2beta1 via DGE in VP4 and interact with alphaXbeta2 (via GPR) and alphaVbeta3 by using VP7 to facilitate cell entry and infection.

**Species/Host:** HEK293

**Molecular Weight:** The heterodimer protein has a predicted molecular mass of 121.8 kDa and 104.5 kDa separately after removal of the signal peptide.

**Molecular Characterization:** ITGA2(Tyr30-Thr1132) 6×His tag and ITGB1(Gln21-Asp728) hFc(Glu99-Ala330)

**Purity:** The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.

**Formulation & Reconstitution:** Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

**Storage & Shipping:** Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

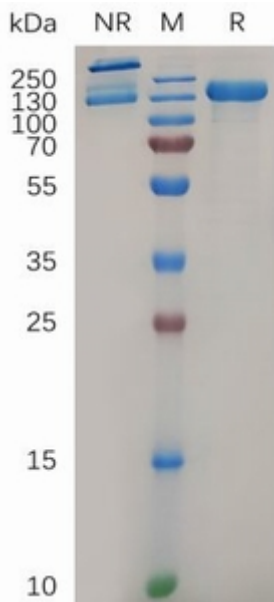


Figure 1. Human ITGA2&ITGB1 Heterodimer Protein, His Tag & hFc Tag on SDS-PAGE under reducing condition.