

## HUMAN ITGAV-HIS AND ITGB1-HFC HETERODIMER PROTEIN

**Cat.#:** 11637

**Product Name:** Human ITGAV-His And ITGB1-HFc Heterodimer Protein

**Size:** 10 µg; 50 µg and 100 µg

**Synonyms:** Integrin alpha V beta 1;ITGAVandITGB1

**Target:** ITGAV andamp;ITGB1

**UNIPROT ID:** ITGAV;ITGB1

**Description:** Recombinant Heterodimer Protein Containg Both Human ITGAV Protein With C-Terminal 6×His Tag And Human ITGB1 Protein With C-Terminal Human Fc Tag

**Background:** Integrin alpha-5/beta-1 is a receptor for ibrinogen. Integrin alpha-1/beta-1, alpha-2/beta-1, alpha-6/beta-1 and alpha-7/beta-1 are receptors for lamimin. Integrin alpha-4/beta-1 is a receptor for VCAM1. It recognizes the sequence Q-I-D-S in VCAM1. Integrin alpha-9/beta-1 is a receptor for VCAM1, cytotactin and osteopontin. It recognizes the sequence A-E-I-D-G-I-E-L in cytotactin. Integrin alpha-V/beta-1 is also a receptor for vitronectin. Beta-1 integrins recognize the sequence R-G-D in a wide array of ligands. Isoform 2 interferes with isoform 1 resulting in a dominant negative effect on cell adhesion and migration (in vitro). When associated with alpha-7/beta-1 integrin, regulates cell adhesion and laminin matrix deposition.

**Species/Host:** HEK293

**Molecular Weight:** The protein has a predicted molecular mass of 107.1 and 104.5 kDa after removal of the signal peptide. The apparent molecular mass of ITGAV-His and ITGB1-hFc is approximately 130-250 kDa due to glycosylation.

**Molecular Characterization:** ITGAV(Phe31-Val992) 6×His tag - 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-HC, 150 mM NaC, 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 ITGAV & ITGB1 Heterodimer Protein, His Tag & hFc Tag on SDS-PAGE under reducing condition.