Synonym

Integrin alpha V beta 1,ITGAV&ITGB1

Source

Cynomolgus Integrin alpha V beta 1 (ITGAV&ITGB1) Heterodimer Protein, His Tag&Tag Free(IT1-C52W4) is expressed from human 293 cells (HEK293). It contains AA Phe 31 - Pro 993 & Gln 161 - Asp 868 (Accession # A0A2K5WCD3-1 & A0A7N9D0D7).
Predicted N-terminus: Phe 31 & Gln 161

Molecular Characterization

Cynomolgus Integrin alpha V beta 1 (ITGAV&ITGB1) Heterodimer Protein, His Tag&Tag Free, produced by co-expression of ITGAV and ITGB1, has a calculated MW of 113 kDa (ITGAV) and 83.6 kDa (ITGB1). The protein migrates as 80-100 kDa and 110-130 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 μg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 150 mM NaCl, pH 8.0 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

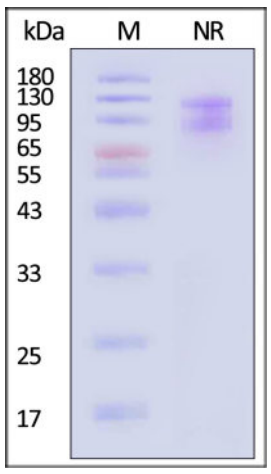
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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 Integrin alpha V beta 1 (ITGAV&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 Star Ribbon Pre-stained Protein Marker).

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.

Clinical and Translational Updates

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