Human Integrin alpha 5 beta 1 (ITGA5&ITGB1) Heterodimer Protein, Tag Free&Tag Free

Catalog # IT1-H5214

Synonym

Integrin alpha 5 beta 1,ITGA5&ITGB1

Source

Human ITGA5&ITGB1 Heterodimer Protein, Tag Free&Tag Free(IT1-H5214) is expressed from human 293 cells (HEK293). It contains AA Phe 42 - Tyr 995 & Gln 21 - Asp 728 (Accession # P08648-1 & P05556-1).
Predicted N-terminus: Phe 42 & Gln 21

Molecular Characterization

ITGA5 (Phe 42 - Tyr 995) P08648-1	Acidic Tail
ITGB1 (Gln 21 - Asp 728) P05556-1	Basic Tail

The protein has a calculated MW of 109.3 kDa & 83.7 kDa. The protein migrates as 120 kDa and 170 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

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 150 mM NaCl, pH 7.4 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

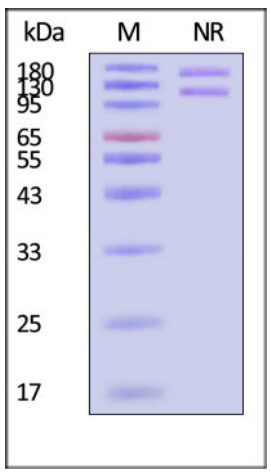
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

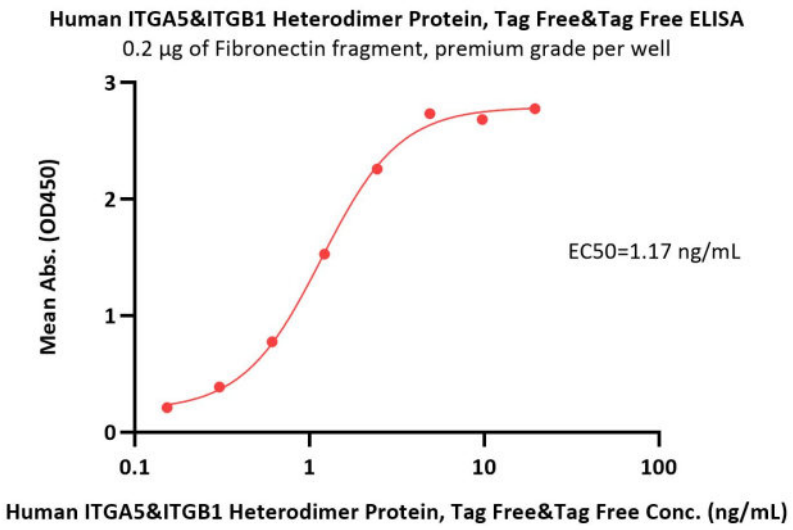
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human ITGA5&ITGB1 Heterodimer Protein, Tag Free&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 95% (With Star Ribbon Pre-stained Protein Marker).

Bioactivity-ELISA



Immobilized Fibronectin fragment, premium grade (Cat. No. FIN-H5113) at 2 μg/mL (100 μL/well) can bind Human ITGA5&ITGB1 Heterodimer Protein, Tag Free&Tag Free (Cat. No. IT1-H5214) with a linear range of 0.15-2.4 ng/mL (QC tested).

Background

The product of this gene belongs to the integrin alpha chain family. Integrins are heterodimeric integral membrane proteins composed of an alpha subunit and a beta subunit that function in cell surface adhesion and signaling. The encoded preproprotein is proteolytically processed to generate light and heavy chains that comprise the alpha 5 subunit. This subunit associates with the beta 1 subunit to form a fibronectin receptor. This integrin may promote tumor invasion, and higher expression of this gene may be correlated with shorter survival time in lung cancer patients. Note that the integrin alpha 5 and integrin alpha V subunits are encoded by distinct genes. [provided by RefSeq, Oct 2015]

Clinical and Translational Updates