

Human ITGAV & ITGB6 Heterodimer Protein



Sino Biological
Biological Solution Specialist

Catalog Number: CT039-H2508H

General Information

Gene Name Synonym:

ITGAV & ITGB6

Protein Construction:

A DNA sequence encoding the extracellular domain (Met 1-Val992) of human ITGAV (P06756-1) was fused with a flag tag at the C-terminus, constructed the plasmid 1; A DNA sequence encoding the extracellular domain (Met1-Asn707) of human ITGB6 (P18564-1) was fused with a polyhistidine tag at the C-terminus, constructed the plasmid 2. The two plasmids were co-expressed and the human ITGAV&ITGB6 heterodimer was purified.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Phe 31 & Gly 22

Molecular Mass:

The recombinant heterodimer of human ITGAV&ITGB6 comprises 1731 (1003+728) amino acids and has a calculated molecular mass of 190.4 (111.1+79.3) KDa.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

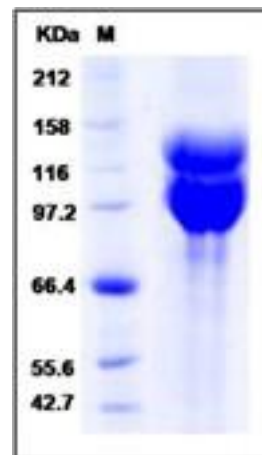
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Integrin alpha-5, also known as ITGA5, is a single-pass type I membrane protein which belongs to the integrin alpha chain family. ITGA5 contains 7FG-GAP repeats. Alpha chain 5 undergoes post-translational cleavage in the extracellular domain to yield disulfide-linked light and heavy chains that join with beta 1 to form a fibronectin receptor. ITGAV&ITGB6 is a receptor for fibronectin and cytotactin. It recognizes the sequence R-G-D in its ligands. Internalisation of ITGAV&ITGB6 via clathrin-mediated endocytosis promotes carcinoma cell invasion.

References

1. Suzuki S., *et al.*, (1987), Amino acid sequence of the vitronectin receptor alpha subunit and comparative expression of adhesion receptor mRNAs. J. Biol. Chem. 262:14080-14085.
2. Sims M.A., *et al.*, (2000), Cloning and characterisation of ITGAV, the genomic sequence for human cell adhesion protein (vitronectin) receptor alpha subunit, CD51. Cytogenet. Cell Genet. 89:268-271.
3. Ota T., *et al.*, (2004), Complete sequencing and characterization of 21,243 full-length human cDNAs. Nat. Genet. 36:40-45.

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