Human Integrin alpha V beta 6 (ITGAV&ITGB6) Heterodimer Protein, His Tag&Tag Free

Catalog # IT6-H52E1AI2

Application

Human ITGAV&ITGB6 Heterodimer Protein, His Tag&Tag Free AIDD-Ready protein is designed for direct use in SPR assays. It is supplied in a sugar-free, glycerol-free formulation to eliminate refractive index interference in SPR. No desalting or buffer exchange is required before use, simplifying the SPR workflow. Each tube features a unique barcode and bottom code for precise sample identification, supporting automated, high-throughput workflows and accelerating the transition from AI prediction to wet-lab validation.

Features and Advantages

- **Directly compatible with SPR:** No desalting or buffer exchange required; supplied as a liquid to reduce sample preparation and improve experimental efficiency.
- **High batch-to-batch consistency:** Each lot is released using SPR QC to ensure experimental reproducibility.
- **Validated with representative drugs:** SPR binding activity is validated using representative drug antibodies to ensure suitability for drug screening and evaluation.
- **Unique Tube Identification:** Each tube features a unique barcode and bottom code, supporting automated and high-throughput workflows. To request the product manifest, please contact our Technical Support team or click the button below.

Synonyms

Integrin alpha V beta 6, ITGAV&ITGB6

Source

Human ITGAV&ITGB6 Heterodimer Protein, His Tag&Tag Free (IT6-H52E1AI2) is expressed from human 293 cells (HEK293). It contains AA Phe 31 - Val 992 (ITGAV) & Gly 22 - Asn 707 (ITGB6) (Accession # NP_002201.1 (ITGAV) & AAI21179.1 (ITGB6)).

Predicted N-terminus: Phe 31 & Gly 22

Molecular Characterization



Human ITGAV&ITGB6 Heterodimer Protein, His Tag&Tag Free, produced by co-expression of ITGAV and ITGB6, has a calculated MW of 112.9 kDa (ITGAV) & 79.6 kDa (ITGB6). Subunit ITGAV is fused with an acidic tail at the C-terminus and followed by a polyhistidine tag and an Avi tag (Avitag™) and subunit ITGB6 contains no tag but a basic tail at the C-terminus. The protein migrates as 90-110 kDa, 120-125 kDa and 130-150 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-HPLC.

Formulation

Formulated in a proprietary trehalose-free buffer, supplied ready-to-use for SPR/BLI analysis - no buffer exchange required.

For detailed formulation, please refer to the batch-specific COA.

Shipping and Storage

This product is supplied and shipped on dry ice.

Please avoid repeated freeze-thaw cycles.

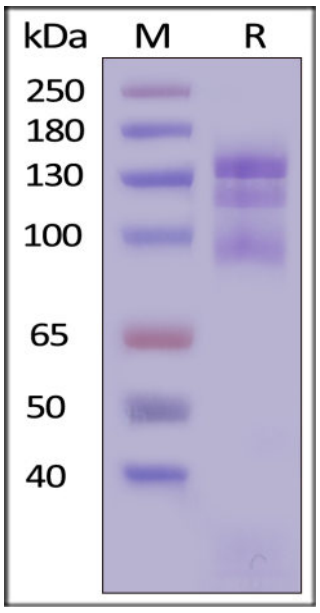
This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 12 months under sterile conditions.

ACRO Quality Management System

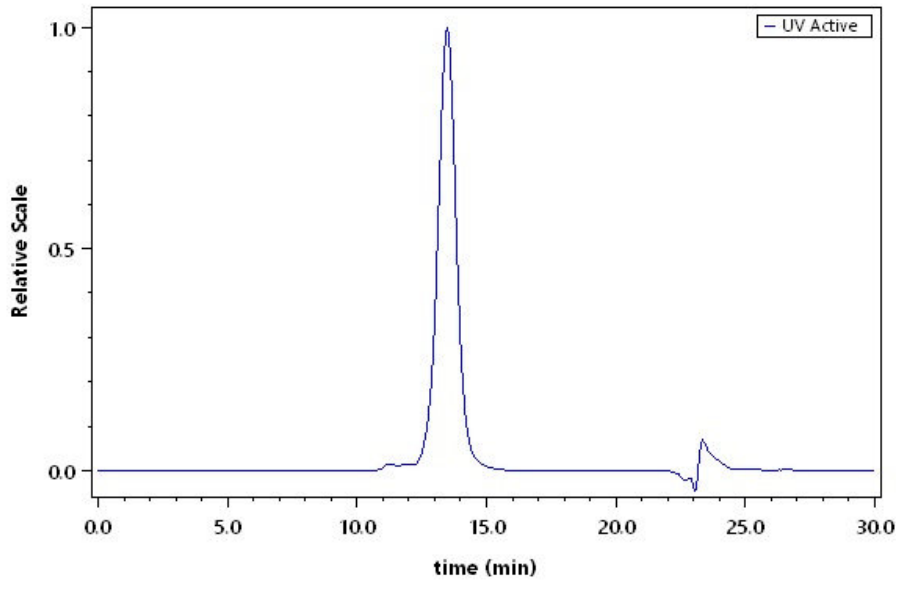
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE



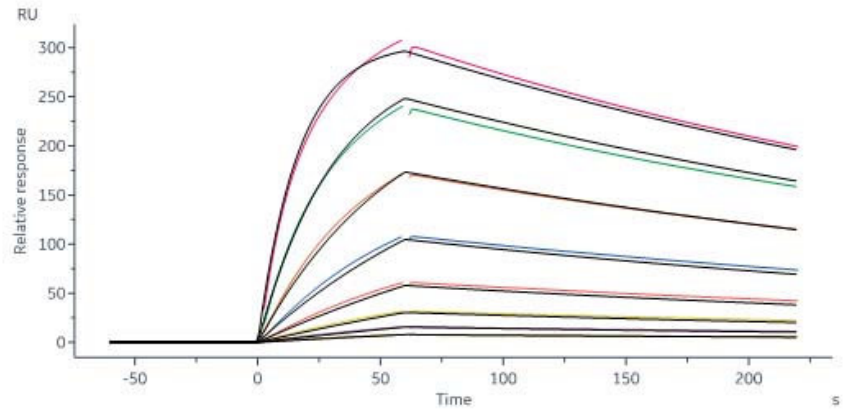
Human ITGAV&ITGB6 Heterodimer Protein, His Tag&Tag Free on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

SEC-HPLC



The purity of Human ITGAV&ITGB6 Heterodimer Protein, His Tag&Tag Free (Cat. No. IT6-H52E1AI2) was greater than 90% as determined by SEC-HPLC.

Activity-SPR



Monoclonal Anti-Integrin alpha V beta 6 antibody,Human IgG1 (AM913) captured on Protein A Chip can bind Human ITGAV&ITGB6 Heterodimer Protein, His Tag&Tag Free (Cat. No. IT6-H52E1AI2) with an affinity constant of 8.91 nM as determined in a SPR assay (Biacore 8K) (QC tested).

Background

Integrin alpha V beta 6 is a heterodimer of beta-6 associating with alpha-V. Integrin alpha-V beta-6 is a receptor for fibronectin and cytotactin. It recognizes the sequence R-G-D in its ligands. Internalisation of integrin alpha-V beta-6 via clathrin-mediated endocytosis promotes carcinoma cell invasion. Also, Integrin alpha-V beta-6 acts as a receptor for coxsackievirus A9 and coxsackievirus B1 as well as herpes simplex virus-1/HHV-1. Furthermore, it binds the TGF-beta latency-associated peptide (LAP) and activates TGF-beta 1 or TGF-beta 3 from large latent complexes. This activation requires interaction with LTBP-1 and fibronectin, and is enhanced by PAR-1.

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