Biotinylated Human TIM-3 / HAVCR2 Protein, Avitag™,His Tag (MALS verified)

Catalog # TM3-H82E7

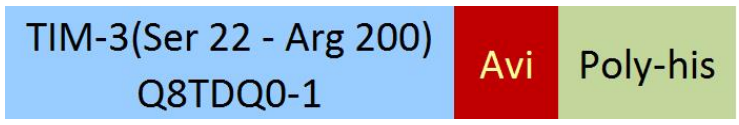
Synonym

HAVCR2,TIM3,TIMD3,FLJ14428,KIM3

Source

Biotinylated Human TIM-3, Avitag,His Tag(TM3-H82E7) is expressed from human 293 cells (HEK293). It contains AA Ser 22 - Arg 200 (Accession # Q8TDQ0-1).
Predicted N-terminus: Ser 22

Molecular Characterization



This protein carries an Avi tag (Avitag™) at the C-terminus, followed by a polyhistidine tag.

The protein has a calculated MW of 23.1 kDa. The protein migrates as 40-50 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 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

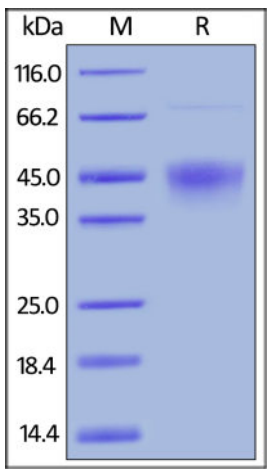
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

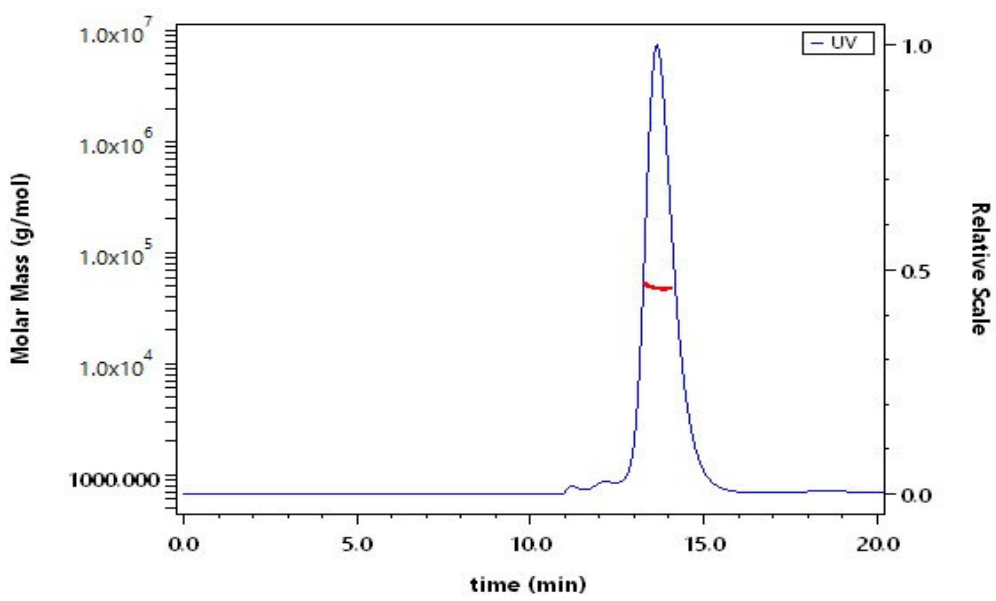
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



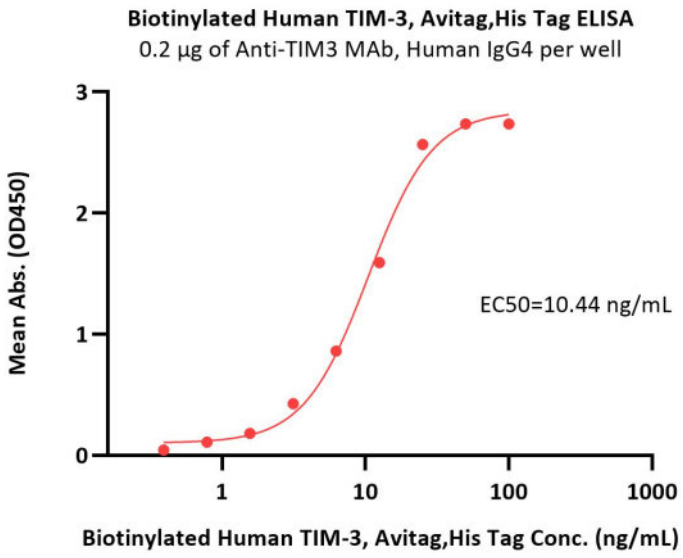
Biotinylated Human TIM-3, Avitag,His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

SEC-MALS



The purity of Biotinylated Human TIM-3, Avitag,His Tag (Cat. No. TM3-H82E7) is more than 85% and the molecular weight of this protein is around 45-65 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized Anti-TIM3 MAb, Human IgG4 at 2 μg/mL (100 μL/well) can bind Biotinylated Human TIM-3, Avitag,His Tag (Cat. No. TM3-H82E7) with a linear range of 0.4-13 ng/mL (QC tested).

Background

Hepatitis A virus cellular receptor 2 is also known as HAVCR2, FLJ14428, KIM3, TIM3, TIMD3, is a member of the TIM family of immune regulating molecules with one Ig-like V-type domain and a Ser/Thr-rich mucin stalk. CD4-positive T helper lymphocytes can be divided into types 1 (Th1) and 2 (Th2) on the basis of their cytokine secretion patterns. Th1 cells and their associated cytokines are involved in cell-mediated immunity to intracellular pathogens and delayed-type hypersensitivity reactions, whereas Th2 cells are involved in the control of extracellular helminthic infections and the promotion of atopic and allergic diseases. The 2 types of cells also cross-regulate the functions of the other. HAVCR2 is a Th1-specific cell surface protein that regulates macrophage activation and enhances the severity of experimental autoimmune encephalomyelitis in mice. HAVCR2 regulates macrophage activation. Inhibits T-helper type 1 lymphocyte (Th1)-mediated auto- and alloimmune responses and promotes immunological tolerance. May be also involved in T-cell homing. Dysregulation of the HAVCR2-galectin-9 pathway could underlie chronic autoimmune disease states in human, such as multiple sclerosis.