Biotinylated Rhesus macaque TROP-2 / TACSTD2 Protein, His,Avitag™ (MALS verified)

Catalog # TR2-R82E7

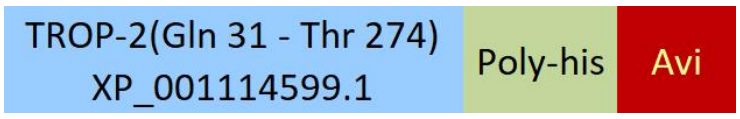
Synonym

TACSTD2,GA733-1,M1S1,TROP2

Source

Biotinylated Rhesus macaque TROP-2 Protein, His,Avitag(TR2-R82E7) is expressed from human 293 cells (HEK293). It contains AA Gln 31 - Thr 274 (Accession # XP_001114599.1).
Predicted N-terminus: Gln 31

Molecular Characterization



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

The protein has a calculated MW of 31.0 kDa. The protein migrates as 43-55 kDa when calibrated against Star Ribbon Pre-stained Protein Marker 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

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

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

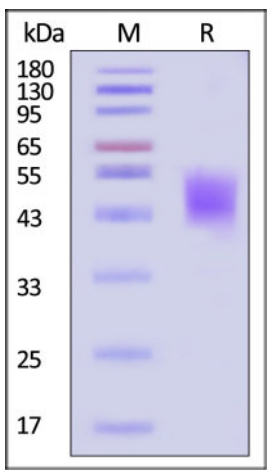
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

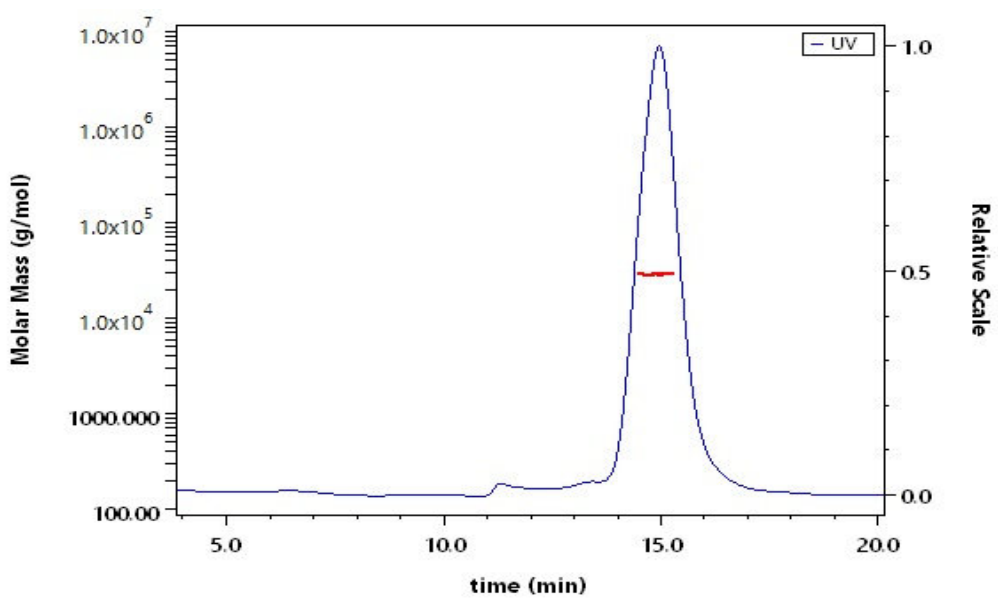
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Rhesus macaque TROP-2 Protein, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS



The purity of Biotinylated Rhesus macaque TROP-2 Protein, His,Avitag (Cat. No. TR2-R82E7) is more than 90% and the molecular weight of this protein is around 25-40 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA

Biotinylated Rhesus macaque TROP-2 / TACSTD2 Protein, His,Avitag™ (MALS verified)

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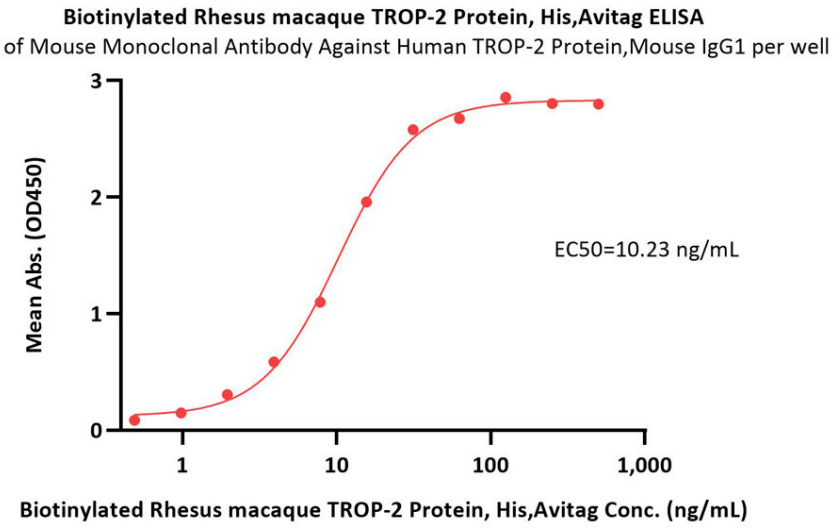
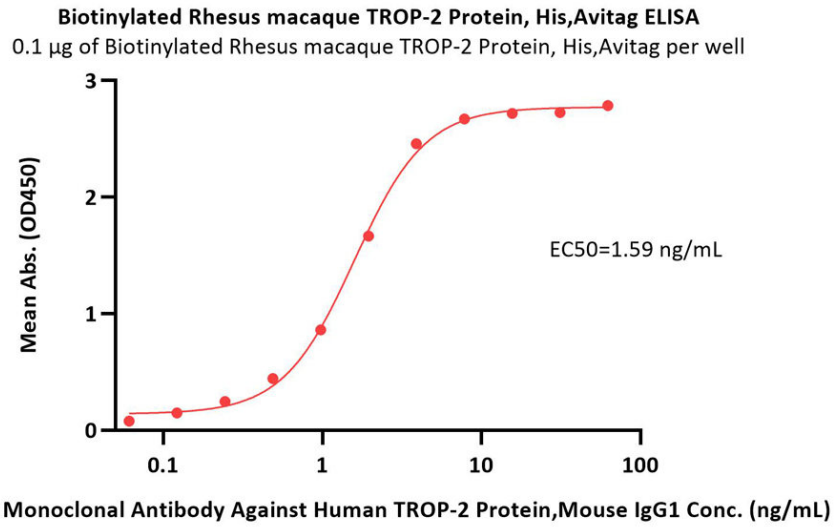


Immobilized Mouse Monoclonal Antibody Against Human TROP-2 Protein,Mouse IgG1 at 1 μg/mL (100 μL/well) can bind Biotinylated Rhesus macaque TROP-2 Protein, His,Avitag (Cat. No. TR2-R82E7) with a linear range of 1-31 ng/mL (QC tested).



Immobilized Biotinylated Rhesus macaque TROP-2 Protein, His,Avitag (Cat. No. TR2-R82E7) at 1 μg/mL (100 μL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 μg/well) plate can bind Mouse Monoclonal Antibody Against Human TROP-2 Protein,Mouse IgG1 with a linear range of 0.1-4 ng/mL (Routinely tested).

Background

TROP-2 is a single-copy gene in human cells, and encodes a type-1 transmembrane glycoprotein which is over-expressed in various malignancies, also referred to as tumor associated calcium signal transducer 2 (TACSTD2), GA733-1 or M1S1. TROP-2 is related to epithelial cell adhesion molecule (EpCAM), also called TROP-1, gp40, and KSA. Trop-1 and Trop-2 are homologous to serum IGF-II-binding proteins and appear as signal transducers. Thus, they likely represent novel cell-surface receptors and may play a role in regulating the growth of carcinoma cells.