



**Synonym**

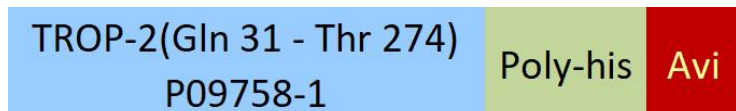
TACSTD2,GA733-1,M1S1,TROP2

**Source**

Biotinylated Human TROP-2, His,Avitag(TR2-H82E5) is expressed from human 293 cells (HEK293). It contains AA Gln 31 - Thr 274 (Accession # [P09758-1](#)).

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 31.2 kDa. The protein migrates as 42-50 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.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>90% 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**

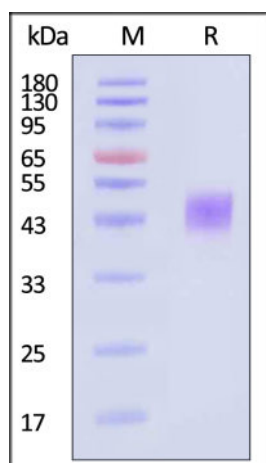
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*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.

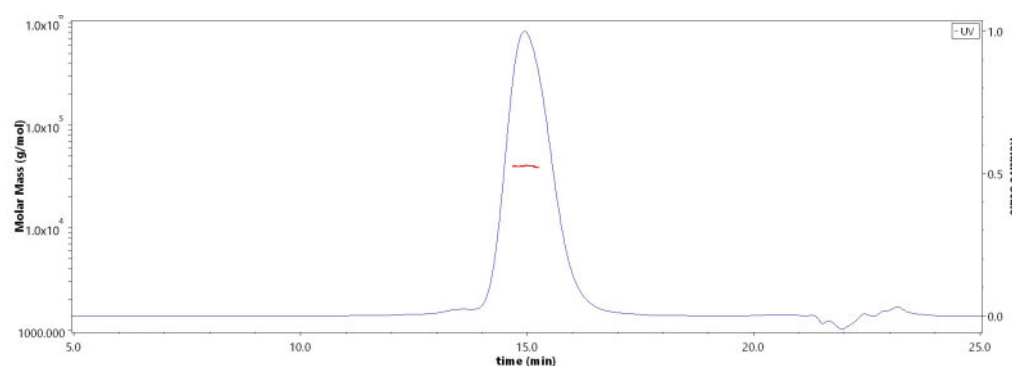
**SDS-PAGE**



Biotinylated Human TROP-2, His,Avitag 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](#)).

**Bioactivity-ELISA**

**SEC-MALS**

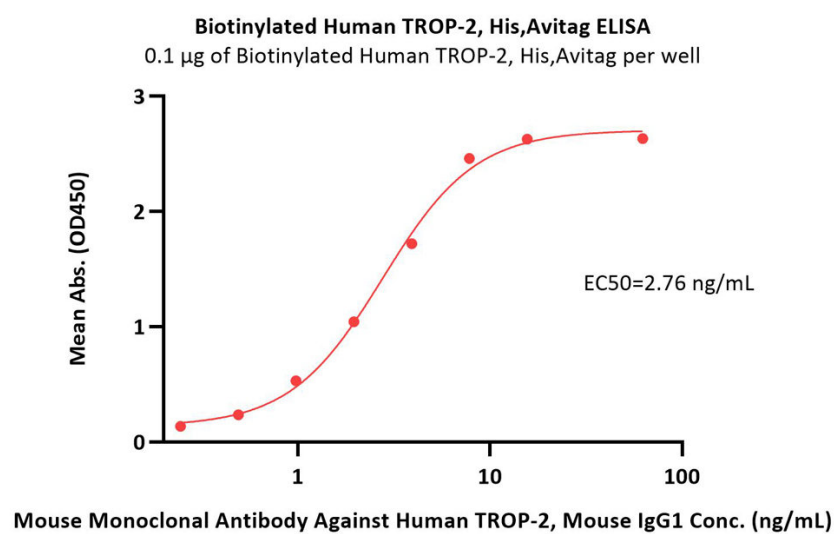


The purity of Biotinylated Human TROP-2, His,Avitag (Cat. No. TR2-H82E5) is more than 90% and the molecular weight of this protein is around 32-47 kDa verified by SEC-MALS.

[Report](#)

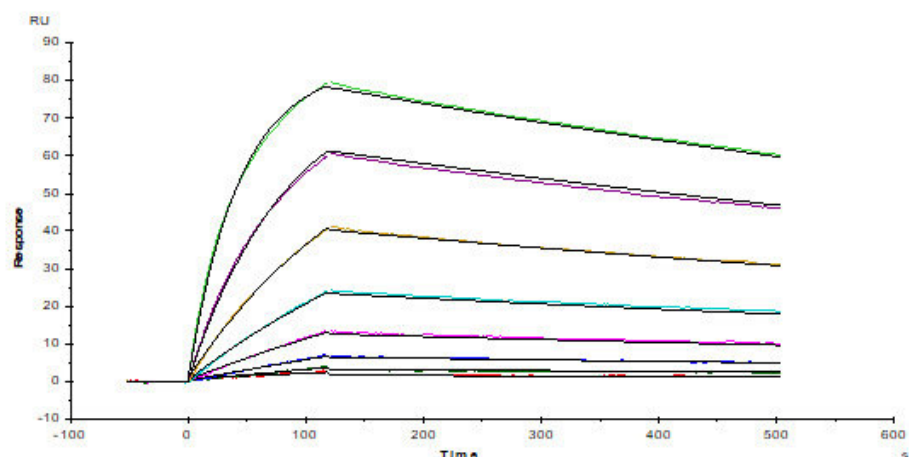
Discounts, Gifts, and more!





Immobilized Biotinylated Human TROP-2, His,Avitag (Cat. No. TR2-H82E5) 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, Mouse IgG1 with a linear range of 0.5-4 ng/mL (QC tested).

**Bioactivity-SPR**



Captured Trop2 antibody on CM5 chip via anti-mouse antibodies surface can bind Biotinylated Human TROP-2, His,Avitag (Cat. No. TR2-H82E5) with an affinity constant of 6.35 nM as determined in a SPR assay (Biacore T200) (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.

**Clinical and Translational Updates**

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