

**Synonym**

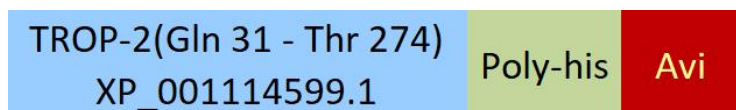
TACSTD2,GA733-1,M1S1,TROP2

**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.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**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**

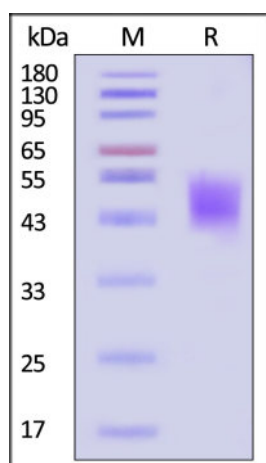
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*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.

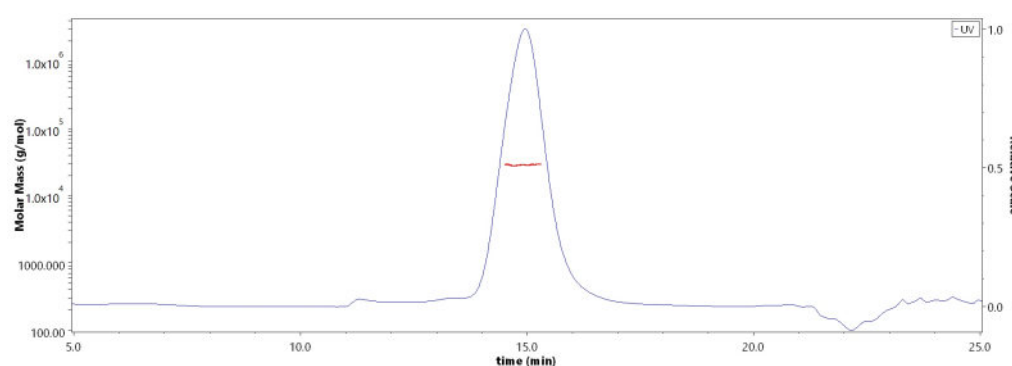
**SDS-PAGE**



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](#)).

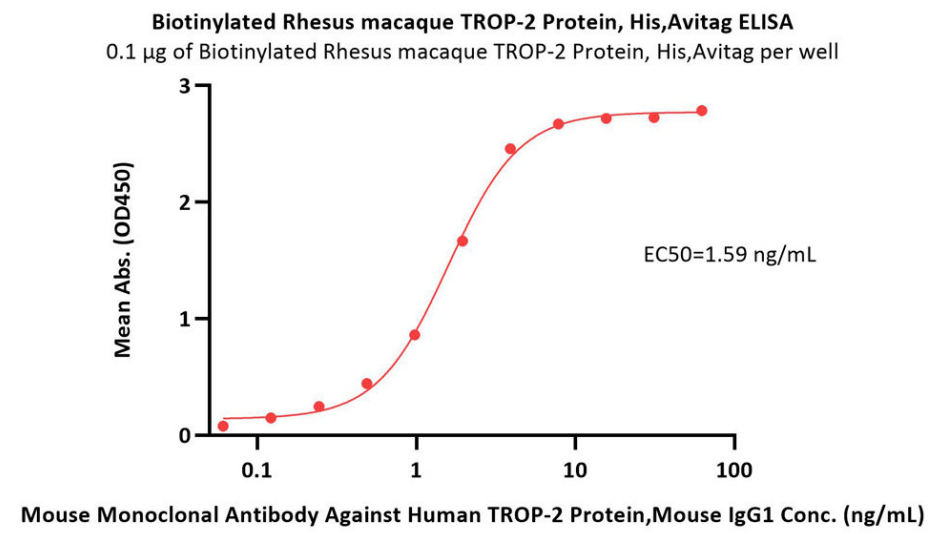
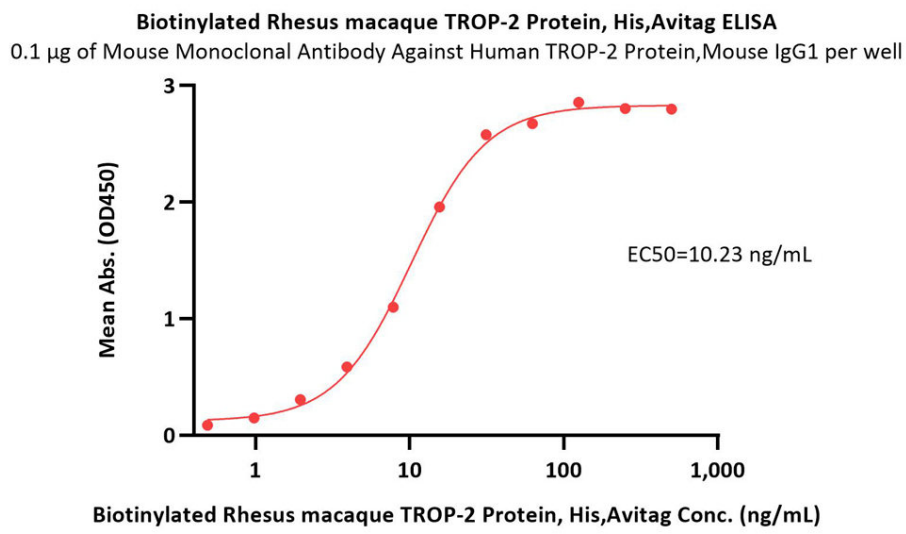
**Bioactivity-ELISA**

**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](#)



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 MIS1. 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

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.