

Synonym

TACSTD2,GA733-1,M1S1,TROP2

Source

Biotinylated Human TROP-2 Protein, Fc, Avitag(TR2-H82F4) is expressed from human 293 cells (HEK293). It contains AA Gln 31 - Thr 274 (Accession # P09758-1).

Predicted N-terminus: Gln 31

Molecular Characterization

TROP-2(Gln 31 - Thr 274) Fc(Pro 100 - Lys 330)
P09758-1 P01857

This protein carries a human IgG1 Fc tag at the C-terminus, followed by an Avi tag (AvitagTM).

The protein has a calculated MW of 55.6 kDa. The protein migrates as 66-80 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using AvitagTM 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.

Formulation

Lyophilized from $0.22~\mu m$ filtered solution in 50~mM Tris, 100~mM Glycine, 25~mM Arginine, 150~mM NaCl, pH7.5 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

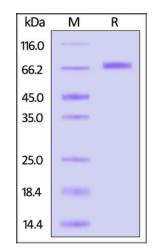
For long term storage, the product should be stored at lyophilized state at -20 $^{\circ}$ C or lower.

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



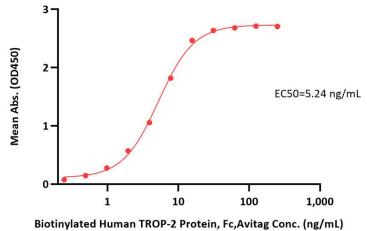
Biotinylated Human TROP-2 Protein, Fc, Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA

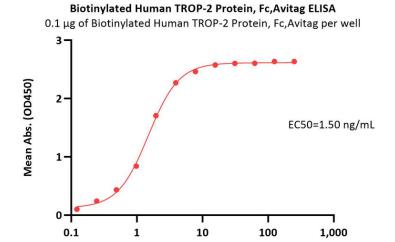




 $\label{eq:Biotinylated Human TROP-2 Protein, Fc, Avitag ELISA} 0.1~\mu\text{g of Mouse Monoclonal Antibody Against Human TROP-2 Protein, Mouse IgG1 per well}$



Immobilized Mouse Monoclonal Antibody Against Human TROP-2 Protein, Mouse IgG1 at 1 μ g/mL (100 μ L/well) can bind Biotinylated Human TROP-2 Protein, Fc, Avitag (Cat. No. TR2-H82F4) with a linear range of 0.2-16 ng/mL (QC tested).



Mouse Monoclonal Antibody Against Human TROP-2 Protein, Mouse IgG1 Conc. (ng/mL)

Immobilized Biotinylated Human TROP-2 Protein, Fc,Avitag (Cat. No. TR2-H82F4) at 1 μ g/mL (100 μ L/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 μ g/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.

Clinical and Translational Updates

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.

