

Human TROP2 / TACSTD2 Protein (His Tag)



Sino Biological
Biological Solution Specialist

Catalog Number: 10428-H08H

General Information

Gene Name Synonym:

EGP-1; EGP1; GA733-1; GA7331; GP50; M1S1; TACD2; TROP-2; TROP2

Protein Construction:

A DNA sequence encoding the extracellular domain (Met1-Thr274) of human TROP2 (NP_002344.2) was expressed fused with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 96 % as determined by SDS-PAGE. ≥ 85 % as determined by SEC-HPLC.

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Predicted N terminal: His 27

Molecular Mass:

The recombinant human TROP2 comprises 259 amino acids and has a predicted molecular mass of 29.4 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rh TROP2 is approximately 42-48 kDa due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

TROP-2, also referred to as tumor associated calcium signal transducer 2 (TACSTD2), GA733-1 or M1S1, is a cell surface glycoprotein highly expressed in a wide variety of epithelial cancers. In contrast, there is little or no expression of Trop-2 in adult somatic tissue. Because it is a cell surface protein that is selectively expressed in tumor cells, Trop-2 is a potential therapeutic target. The cytoplasmic tail of Trop-2 possesses potential serine and tyrosine phosphorylation sites and a phosphatidylinositol binding consensus sequence. Trop-2 transduces an intracellular calcium signal, are consistent with the hypothesis that it acts as a cell surface receptor and support a search for a physiological ligand. TROP2 encoding by an intronless gene was originally defined by the monoclonal antibody GA733, and is a member of a family of at least two type I membrane proteins. The other known member is GA733-2, also called EpCAM and TROP1. It has been suggested by studies that the GA733-1 gene was formed by the retroposition of the GA733-2 gene via an mRNA intermediate.

References

Ripani E, et al. (1998) Human Trop-2 is a tumor-associated calcium signal transducer. *Int J Cancer*. 76(5): 671-6.

Wang J, et al. (2008) Identification of Trop-2 as an oncogene and an attractive therapeutic target in colon cancers. *Mol Cancer Ther*. 7(2): 280-5.