



# Recombinant Protein Technical Manual

## Recombinant Mouse TROP2/TACSTD2 Protein (His Tag)

RPES1316

### Product Data:

**Product SKU:** RPES1316

**Size:** 100µg

**Species:** Mouse

**Expression host:** HEK293 Cells

**Uniprot:** Q8BGV3

### Protein Information:

**Molecular Mass:** 29.4 kDa

**AP Molecular Mass:** 45 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 92 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg of the protein as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Tumor-associated calcium signal transducer 2; Tacstd2; Trop2; Cell surface glycoprotein Trop-2; TROP-2; C80403; EGP; GA733; Ly97

## Immunogen Information:

**Sequence:** Met 1-Gln 270

## Background:

TROP-2, also referred to as tumor associated calcium signal transducer 2 (TACSTD2), GA733 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 gene was formed by the retroposition of the GA733-2 gene via an mRNA intermediate.