

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

**Catalog Number:** PKSM040435

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

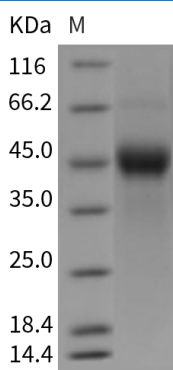
### Description

|                      |  |
|----------------------|--|
| <b>Species</b>       | Mouse  |
| <b>Source</b>        | HEK293 Cells-derived Mouse TROP2/TACSTD2 protein Met 1-Gln 270, with an C-terminal His   |
| <b>Calculated MW</b> | 29.4 kDa   |
| <b>Observed MW</b>   | 45 kDa   |
| <b>Accession</b>     | Q8BGV3   |
| <b>Bio-activity</b>  | Measured by the ability of the immobilized protein to support the adhesion of U937 human histiocytic lymphoma cells. When $5 \times 10^4$ cells/well are added to TACSTD2-coated plates (40 µg/mL, 100 µL/well), > 50% cells will adhere after 1 hour at 37°C. |

### Properties

|                       |   |
|-----------------------|---|
| <b>Purity</b>         | > 92 % as determined by reducing SDS-PAGE.  |
| <b>Endotoxin</b>      | < 1.0 EU per µg of the protein as determined by the LAL method.   |
| <b>Storage</b>        | Generally, 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. |
| <b>Shipping</b>       | This product is provided as lyophilized powder which is shipped with ice packs.   |
| <b>Formulation</b>    | Lyophilized from sterile PBS, pH 7.4<br>Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.<br>Please refer to the specific buffer information in the printed manual.             |
| <b>Reconstitution</b> | Please refer to the printed manual for detailed information.  |

### Data



> 92 % as determined by reducing SDS-PAGE.

### Background

#### For Research Use Only

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 phosphatidyl-inositol 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.

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