

Active Recombinant Mouse Tacstd2 Homodimer Protein, Flag&His tagged

Cat. No. Tacstd2-64M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	TROP-2 protein dimer contains a TROP-2 extracellular domain (UniProt# Q8BGV3) fused with a proprietary cis-dimer motif followed by a tandem FLAG-His tag at the C-terminus was expressed in HEK293T.
Species	Mouse
Source	HEK293T
ProteinLength	25-270 aa
Description	TROP-2 (trophoblast cell surface antigen 2) is a cell-surface type I transmembrane glycoprotein expressed in epithelial cells of various tissues. TROP-2 is also known as TROP2, TACSTD2, EGP-1, pancreatic carcinoma marker protein GA733–1/GA733, gastrointestinal tumor-associated antigen GA7331, GP50, M1S1, tumor-associated calcium signal transducer 2, CAA1, and TTD2. TROP-2 exists as a monomer on the cell surface but can form dimers or oligomers on cancer cells, enhancing its role in cancer progression. TROP-2 contains an extracellular domain, a single transmembrane helix, and a cytoplasmic tail. The extracellular domain is comprised of three subdomains: a cysteine-rich domain, a thyroglobulin type-1 domain, and a cysteine-poor domain. TROP-2 is normally involved in the maintenance of epithelial tissue integrity. It is overexpressed in many human cancers including breast cancer, non-small-cell lung cancer, thyroid cancer, gastric cancer, pancreatic cancer, and ovarian cancer. TROP-2 overexpression is involved in cancer cell growth,

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proliferation, invasion, migration, and survival of cancer cells, and is associated with tumor aggressiveness and poor prognosis. TROP-2 is an emerging target of cancer therapeutics. Mouse TROP-2 shares 80–85% amino acid identity with human TROP-2. The functional domains are highly conserved, suggesting similar biological roles.

Molecular Mass	74 kDa
Purity	Greater than 90% dimer form as determined by SDS-PAGE under non-reducing condition
Application	Verified Applications: ELISA for TROP-2-specific antibody binding assays. Suggested Applications: SPR & BLI for TROP-2-specific antibody binding assays. Animal immunization, RUO.
Storage	Store at -80 centigrade.
Storage Buffer	0.22µm filtered PBS, pH 7.4
Shipping	Frozen Dry Ice

GENE INFORMATION

Gene Name	Tacstd2 tumor-associated calcium signal transducer 2 [Mus musculus (house mouse)]
Official Symbol	Tacstd2
Synonyms	TACSTD2; tumor-associated calcium signal transducer 2; lymphocyte antigen 97; cell surface glycoprotein Trop-2; tunor-associated calcium signal transducer 2; Ly97; EGP-1; TROP2; C80403; GA733-1; MGC141612; MGC141613;

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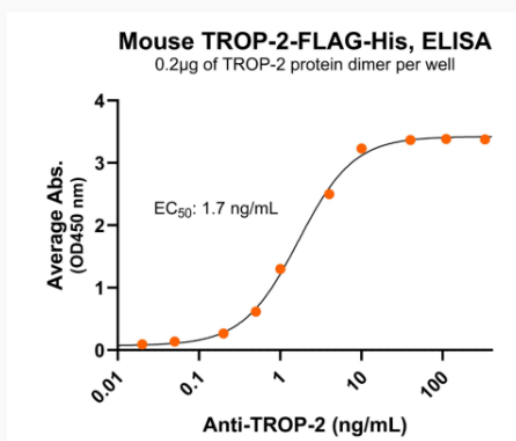
Gene ID 56753

mRNA Refseq NM_020047

Protein Refseq NP_064431

UniProt ID Q8BGV3

**Bioactivity-Antibody
Binding**



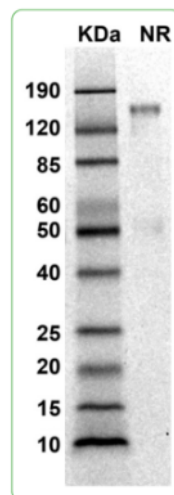
Immobilized mouse TROP-2 protein dimer, FLAG-His Tag at 2 µg/mL (100 µL/well) can bind anti-mouse TROP-2 monoclonal antibody with half maximal effective concentration (EC₅₀) range of 0.8-3.3 ng/mL (QC tested).

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SDS-PAGE and WB



MW: Molecular Weight marker reduced condition NR: TROP-2 dimer under non-reduced condition

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