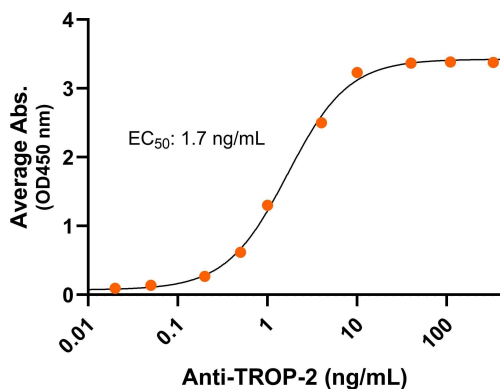


Bioactivity – Antibody Binding

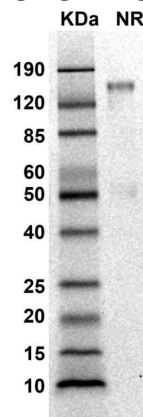
Mouse TROP-2-FLAG-His, ELISA

0.2 µg of TROP-2 protein dimer per well



Immobilized mouse TROP-2 dimer protein, FLAG-His Tag (Cat. No. CSP-25191-02) at 2 µg/mL (100 µL/well) can bind anti-mouseTROP-2 monoclonal antibody with half maximal effective concentration (EC50) range of 0.8-3.3 ng/mL (QC tested).

SDS-PAGE



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

The migration range of the dimer protein with glycosylation under non-reduced condition is between 120 and 190 kDa on SDS PAGE.



Bioactive, Recombinant Mouse TROP-2 Protein Dimer, FLAG-His Tag
Product Code: CSP-25191-02
For Research Use Only (RUO)

Expression Host

HEK293T

Protein Name

TROP-2

Purity

Greater than 90% dimer form as determined by SDS-PAGE under non-reducing condition

Alternate Name(s)

TACSTD2, epithelial glycoprotein-1, EGP-1, EGP1, GA733-1, GA7331, pancreatic carcinoma marker protein GA733-1/GA733, gastrointestinal tumor-associated antigen GA7331, GP50, membrane component chromosome 1 surface marker 1, M1S1, TROP2, tumor-associated calcium signal transducer 2, tumor associated calcium signal transducer 2, trophoblast cell surface antigen 2, CAA1, TTD2

Protein Construct

TROP-2 dimer protein contains a TROP-2 extracellular domain (UniProt# Q8BGV3) fused with a proprietary dimer motif followed by a tandem FLAG-His tag at the C-terminus. Expressed in HEK293T cell line.

Amino Acid Range

Q25-G270

SDS-Page Molecular Weight

74 kDa. The migration range of the dimer protein with glycosylation under non-reduced condition is between 120 and 190 kDa on SDS PAGE.

Formulation

0.22µm filtered PBS, pH 7.4

Shipping Conditions

Frozen Dry Ice

Stability & Storage

-80°C

Background

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, proliferation, invasion, migration, and survival of cancer cells, and is associated with tumor



Bioactive, human TIGIT dimer, Fc Tag
Product Code: CSP-24028
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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.