

## Technical Data Sheet

### Biotinylated Human Trop2 Protein (C-His-Avi)

**Catalog Number:** 805703, 805704

**Size:** 25 ug, 100 ug

**Target Name:** TROP2, TACSTD2, GA733-1, M1S1

**Regulatory Status:** RUO

#### Product Details

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**Application:** ELISA, BLI

**Format:** Liquid, Biotinylated

**Expression Host:** CHO

**Species:** Human

**Sources:** Recombinant Human Trop2 (Gln31-Thr274) with C-terminus His-Avi tag is expressed in CHO cell. This protein was site-specifically labeled with Biotin by BirA ligase.

**Accession Number:** P09758

**Molecular Weight:** The protein has a predicted molecular weight of 31 kDa. Under DTT-reducing conditions, it migrates at approximately 40-50 kDa on SDS-PAGE.

**Affinity Tag:** C-His-Avi

**Purity:** >95% based on SDS-PAGE under reducing condition

**Formulation:** 1xPBS buffer, pH7.4, 0.22 µm filtered

**Endotoxin level:** Not tested

**Protein Concentration:** 25µg size is bottled at 0.2mg/mL concentration. 100 µg size is supplied at a lot-specific concentration.

**Storage and Handling:** Briefly centrifuge the vial upon receipt. An unopened vial can be stored at 4°C for up to 2 weeks, or at -20°C or below for up to six months. The protein may be further diluted to 0.1 mg/mL using 0.22 µm-filtered PBS buffer (pH 7.4). For long-term storage, the diluted stock solution should be aliquoted and stored at ≤ -70°C to minimize freeze-thaw cycles. If additional dilution is required, carrier proteins such as FBS or BSA should be added to maintain protein stability.

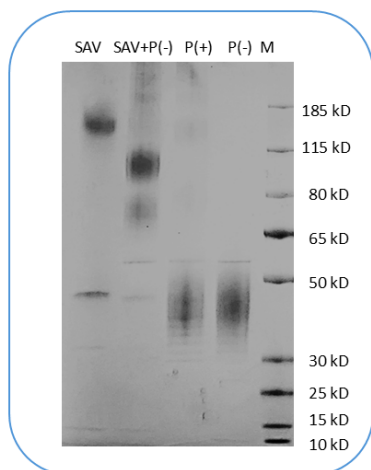
#### Background Information

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TROP-2, also known as TACSTD2, is a 35.7 kD protein that belongs to the EpCAM family. It is a cell surface receptor that can transduce calcium signals. Mutations of this gene are associated with gelatinous drop-like corneal dystrophy. TROP-2 is highly expressed in a variety of epithelial cancers, making it a potential therapeutic target. The cytoplasmic tail of TROP-2 contains potential phosphorylation sites and a phosphatidyl-inositol binding sequence, suggesting its role in signal transduction. As a member of a family of at least two type I membrane proteins, TROP-2 is closely related to EpCAM, also known as TROP-1, and may play a role in regulating carcinoma cell growth.

#### Product Data

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Human Trop2 Protein (C-His-Avi) was biotinylated in vitro using BirA ligase. SDS-PAGE analysis under reducing (P+) and non-reducing (P-) conditions shows the protein has a purity greater than 95%. A gel shift assay using co-incubation with streptavidin indicates that the biotinylation efficiency of the Trop2 protein exceeds 95%.