

Technical Data Sheet

Biotinylated Human Trop1/EpCAM Protein (C-Fc-Avi)

Catalog Number: 806603, 806604

Size: 25 ug, 100 ug

Target Name: EPCAM, TROP1, TACSTD1, CD326, DIAR5, EGP2, EGP314, EGP40, ESA, GA733-2, HNPCC8, HNPCC-8, KS1, 4, KSA, M4S1, MIC18, MK1

Regulatory Status: RUO

Product Details

Application: ELISA, BLI

Format: Liquid, Biotinylated

Expression Host: CHO

Species: Human

Sources: Recombinant Human Trop1 (Gln24-Lys265) with C-terminus Fc-Avi tag is expressed in CHO cell. This protein was site-specifically labeled with Biotin by BirA ligase.

Accession Number: P16422

Molecular Weight: The protein has a predicted molecular weight of 55.7 kDa. Under DTT-reducing conditions, it migrates at approximately 60-65 kDa on SDS-PAGE.

Affinity Tag: C-Fc-Avi

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

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

Endotoxin level: Not tested

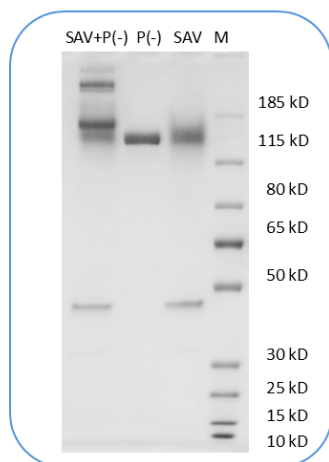
Protein Concentration: 25µg size is bottled at 0.2mg/mL concentration. 100 µg size is supplied at a lot-specific concentration.

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

Ep-CAM, also known as tumor-associated calcium signal transducer 1, epithelial cell surface antigen, epithelial glycoprotein 2 (EGP2), adenocarcinoma-associated antigen, and TROP1, is a 40 kD glycosylated type I transmembrane protein containing six disulfide bridges and one THYRO domain. It is highly expressed on normal epithelial cells, including those in bone marrow, colon, and lung, and is also found on carcinomas, particularly those of gastrointestinal origin. Recent studies have shown that Ep-CAM expression occurs during early erythropoiesis. As a homotypic calcium-independent cell adhesion molecule, it plays a role in carcinogenesis by inducing genes involved in cellular metabolism and proliferation. Ep-CAM has been identified as a potential immunotherapeutic target for the treatment of human carcinomas.

Product Data



Human Trop1 Protein (C-Fc-Avi) was biotinylated in vitro using BirA ligase. SDS-PAGE analysis under 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 Trop1 protein exceeds 90%.