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Human TROP2 Protein; hFc Tag

Product Information

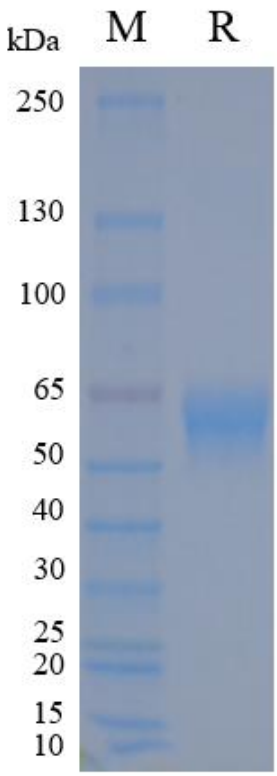
Product Name	Human TROP2 Protein; hFc Tag
Storage temp	Store at ≤ -70℃, stable for 6 months after receipt. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.
Catalog# / Size	**GM-87611RP-100 / 100 μg** **GM-87611RP-1000 / 1 mg**

Protein Information

Alternative Names	TACSTD2,GA733-1,M1S1
Source	Human TROP2 Protein; hFc Tag (GM-87611RP) is expressed from human 293 cells (HEK-293). It contains AA Thr 88 - Thr 274 (Accession # P09758-1). This protein carries a hFc tag at the C-terminus.
Purity	> 95% as determined by SDS-PAGE
Endotoxin	< 1 EU/μg, determined by LAL gel clotting assay
Predicted Mol Mass	47.5 kDa
Formulation	Supplied as a 0.2 μm filtered solution of PBS, pH7.2-7.4.
Description	TROP2 protein (Trophoblast Cell Surface Antigen 2) is a transmembrane glycoprotein that belongs to the tumor-associated calcium signal transducer (TACSTD) family. It is encoded by the *TACSTD2* gene and is a protein associated with human tumorigenesis and cancer progression. TROP2 protein was initially discovered in trophoblast cells and later detected in various epithelial-derived tumor tissues, while its expression in normal adult tissues is limited. TROP2 protein regulates cell proliferation, migration, adhesion, and self-renewal by binding to yet-to-be-fully-characterized ligands and by modulating intracellular calcium signaling as well as downstream pathways such as MAPK and PI3K/AKT via its cytoplasmic tail. Epithelial cells and cancer stem cells are important cell types that express TROP2, playing critical functions in tissue barrier maintenance, tissue repair, tumor development, and metastasis, making them central players in both tissue homeostasis and tumor progression. Research indicates that TROP2 protein plays a significant role in promoting tumor cell survival, enhancing invasive and metastatic capabilities, and regulating epithelial-mesenchymal transition (EMT). Additionally, the expression of TROP2 protein is associated with poor prognosis, drug resistance, and malignancy in various solid tumors, including breast cancer, colorectal cancer, pancreatic cancer, and non-small cell lung cancer, making it a promising target for immunotherapy, particularly in antibody-drug conjugate (ADC)-based therapies.

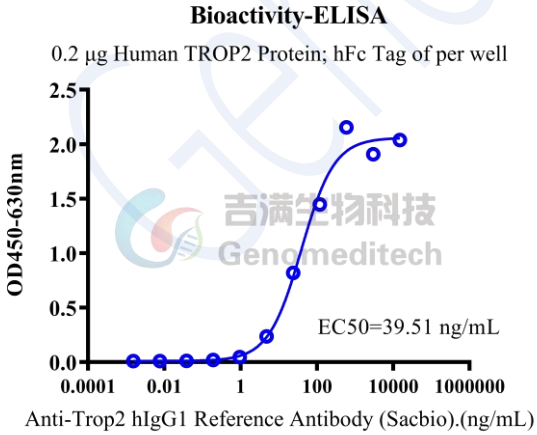
Version:4.0

SDS-PAGE



On SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Human TROP2 Protein; hFc Tag (Catalog # GM-87611RP) was immobilized at 2 μg/ml (100 μL/well). Increasing concentrations of Anti-Trop2 hIgG1 Reference Antibody (Sacbio) (Catalog # 87499MAB) were added.