

Mouse anti-Human Trop-2/TACSTD2 Monoclonal Antibody | anti-Trop-2/TACSTD2 antibody

Trop-2/TACSTD2 (Extracellular region) Antibody

CATALOG # AAA71717	HOST Mouse	REACTIVITY Human	APPLICATIONS ELISA, Immunocytochemistry, Immunoprecipitation, Western Blot
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PRODUCT SYNONYMS

Trop-2/TACSTD2; Monoclonal Antibody; Trop-2/TACSTD2 (Extracellular region) Antibody; Trop-2/TACSTD2 (Extracellular region); Trop2 M005; anti-Trop-2/TACSTD2 antibody

PRODUCT SPECIFICATIONS

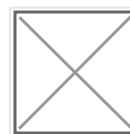
Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1
Clone Number	M005
Specificity	Clone M005 detects a 50-65kDa* band corresponding to the molecular mass of Trop-2 on SDS-PAGE immunoblots of native human A431, MDA-MB-231, and MCF-7 cell lysates. The antibody also detects denatured Trop-2, but with less affinity. Lower dilutions of the antibody should be used for denatured western blot. Clone M005 can be used for western blot, immunocytochemistry, ELISA, and immunoprecipitation, as well as for detecting live unfixed cells.
Purity/Purification	Protein G chromatography
Form/Format	Mouse monoclonal antibody purified with protein G chromatography is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-Trop-2/TACSTD2 antibody	ELISA, ICC (Immunocytochemistry), IP (Immunoprecipitation), WB (Western Blot)
Immunogen	Clone M005 was generated from a proprietary antigen related to the extracellular region of human Trop-2 from the A431 epidermoid carcinoma cell line.
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



Standard Curve (Sample)

Representative Standard Curve using mouse monoclonal anti-Trop-2 (TM0051) for ELISA capture of human recombinant Trop-2 extracellular region with His-tag. Capture was detected by using an anti-His-tag antibody followed by appropriate secondary antibody conjugated to HRP.



ICC (Immunocytochemistry)

Immunocytochemical labeling of Trop-2 in paraformaldehyde fixed human A431 cells. The cells were labeled with mouse monoclonal anti-Trop-2 (clone M005). The antibody was detected using goat anti-mouse DyLight 594.



WB (Western Blot)

Western blot analysis of human A431 (lanes 1 & 2), MDA-MB-231 (lanes 3 & 4), and MCF-7 (lanes 5 & 6) cell lysates under native (lanes 1, 3 & 5) and denatured (lanes 2, 4 & 6) conditions. The blots were probed with mouse monoclonal anti-Trop-2 (TM0051) at 1:1000 (lanes 1-6).

ADDITIONAL INFORMATION

Related Product Information for anti-Trop-2/TACSTD2 antibody	Trop-2 (TACSTD2) is a transmembrane glycoprotein found on invasive trophoblast cells and in several epithelial type cancer cells. Trop-2 has an extracellular domain with EGF thyroglobulin type-1 repeats, a transmembrane domain and a short cytoplasmic tail with a HIKE domain containing a PIP2 binding site. This glycoprotein functions in many signaling pathways including interaction of its extracellular domain with integrin beta1 to regulate FAK signaling, interaction of its transmembrane domain with claudin 1 and claudin 7 during tight junction formation, and regulation of intracellular calcium release by its PIP2 binding and activation of the ERK/MAPK pathway. These Trop-2 functions may be important during tumor proliferation, metastasis and invasion.
References	Shvartsur A & Bonavida B (2015) Genes Cancer 6(3-4):84 McDougall, AR et al. (2015) Dev Dyn. 244:99

NCBI AND UNIPROT INFORMATION

NCBI GI #	166795236
NCBI GeneID	4070
NCBI Accession #	NP_002344.2
NCBI GenBank Nucleotide #	NM_002353.2
UniProt Accession #	P09758; Q15658; Q6FG48; Q7Z7Q4; Q96QD2
Molecular Weight	35,709 Da
NCBI Official Full Name	tumor-associated calcium signal transducer 2
NCBI Official Synonym Full Names	tumor-associated calcium signal transducer 2
NCBI Official Symbol	TACSTD2
NCBI Official Synonym Symbols	EGP1; GP50; M1S1; EGP-1; TROP2; GA7331; GA733-1
NCBI Protein Information	tumor-associated calcium signal transducer 2; epithelial glycoprotein-1; cell surface glycoprotein TROP2; cell surface glycoprotein Trop-2; pancreatic carcinoma marker protein GA7331; pancreatic carcinoma marker protein GA733-1; gastrointestinal tumor-ass
UniProt Protein Name	Tumor-associated calcium signal transducer 2
UniProt Gene Name	TACSTD2
UniProt Synonym Gene Names	GA733-1; M1S1; TROP2
UniProt Entry Name	TACD2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.