

Anti-Human TROP2 / TACSTD2 Antibody (FITC)



Sino Biological Inc.
Biological Solution Specialist

Catalog Number: 10428-MM01-F

General Information	
Immunogen:	Recombinant Human TROP2 protein (Catalog#10428-H08H)
Reagents:	FITC-conjugated mouse monoclonal antibody
Specificity:	Human TROP2 / TACSTD2
Clone ID:	4F4B1B3
Ig Type:	Mouse IgG1
Applications:	Flow Cytometry, WB
Concentration:	5 µl/Test, 0.2 mg/ml
Formulation:	Aqueous solution containing 0.5% BSA and 0.1% sodium azide
Storage:	2 °C - 8 °C in the dark

Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, recombinant Human TROP2 / TACSTD2 (rh TROP2 / TACSTD2; Catalog#10428-H08H; NP_002344.2; Met 1-Thr 274) and conjugated with FITC under optimum conditions, the unreacted FITC was removed.

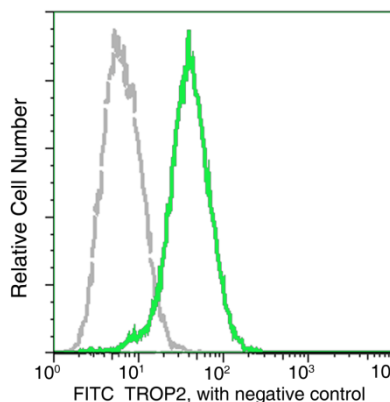
Storage

This antibody is stable for 12 months from date of receipt when stored at 2°C - 8°C. Protected from prolonged exposure to light. **Do not freeze !**

Sodium azide is toxic to cells and should be disposed of properly. Flush with large volumes of water during disposal

Applications

Flow Cytometry – MCF-7 cells were detached using 1X trypsin, washed, then stained with FITC Mouse anti-human TROP2.



Flow cytometric analysis of anti-human TROP2 on MCF-7 cells.

Flow cytometry was performed on a BD FACSCalibur flow cytometry system. Please refer to www.sinobiological.com/Flow-Cytometry-FACS-Protocols-a-750.html for technical protocols.

Western blot – This antibody can be used at 1-2 µg/mL with the appropriate secondary reagents to detect Human TROP2 in WB.

Specificity

Human TROP2 / TACSTD2

No cross-reactivity in ELISA with

- Human E-cad
- Human CD146
- Human CD171
- Human BCAM
- Human VCAM1
- Human ICAM1
- Human cell lysate (293 cell line)

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

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Background

TROP2, also referred to as tumor associated calcium signal transducer 2 (TACSTD2), GA733-1 or M1S1, is a cell surface glycoprotein highly expressed by human carcinomas. TROP2 encoding by an intronless gene was originally defined by the monoclonal antibody GA733, and is a member of a family of at least two type I membrane proteins. The other known member is GA733-2, also called EpCAM and TROP1. It has been suggested by studies that the GA733-1 gene was formed by the retroposition of the GA733-2 gene via an mRNA intermediate. The cytoplasmic tail of TROP2 possesses potential serine and tyrosine phosphorylation sites and a conserved phosphatidylinositol binding consensus sequence. TROP2 transduces an intracellular calcium signal and acts as a cell surface receptor, meanwhile is involved in the regulation of cell-cell adhesion. Accordingly, as a widespread stimulator of human cancer growth and a unique marker and causal factor of metastatic cancer, TROP2 is a possible candidate for diagnosis and molecular target therapy. Mutations of this gene result in gelatinous drop-like corneal dystrophy, an autosomal recessive disorder characterized by severe corneal amyloidosis leading to blindness.

Reference

1. Fornaro, M. et al., 1995, *Int. J. Cancer*. 62: 610-618.
2. Ripani, E. et al., 1998, *Int. J. Cancer*. 76: 671-676.
3. Linnenbach, A.J. et al., 1993, *Mol. Cell. Biol.* 13: 1507-1515.
4. Ohmachi, T. et al., 2006, *Clin. Cancer. Res.* 12: 3057-3063.
5. Tsujikawa, M. et al., 1999, *Nat. Genet.* 21: 420-423.