abcam

ab275727

# APC Anti-TROP2 antibody [001]

Recombinant

## Key facts

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|---|---|
| **Isotype** | IgG |
| **Host species** | Rabbit |
| **Conjugation** | APC |
| **Excitation/Emission** | Ex: 650nm, Em: 660nm |
| **Storage buffer** | Preservative: 0.09% Sodium azide Constituents: 0.5% BSA |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | Recombinant Fragment Protein within Human TACSTD2 aa 1-300. The exact immunogen used to generate this antibody is proprietary information. Database link P09758 |
| **Clone number** | 001 |
| **Purification technique** | Affinity purification Protein A |
| **Concentration** | 0.1 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

## Flow Cyt

**Tested**

| | |
|---|---|
| **Species** | Human |

| | |
|---|---|
| **Dilution info** | - |
| **Notes** | 10 µL/Test |

## Target data

See full target information TACSTD2

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|---|---|
| **Function** | May function as a growth factor receptor. |

## Storage

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|---|---|
| **Shipped at conditions** | Blue Ice |
| **Appropriate short-term storage conditions** | +4°C |
| **Appropriate long-term storage conditions** | +4°C |
| **Storage information** | Do Not Freeze, Store in the dark |

## Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

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|---|---|
| **Activity summary** | TROP2 also known as TACSTD2 or tumor-associated calcium signal transducer 2 is a single-pass type I membrane glycoprotein. This protein is about 35 kDa in mass and primarily expresses in epithelial tissues. It acts as a transmembrane receptor that plays a role in signal transduction due to its domain structure binding and activation processes on the cell surface. TROP2 exhibits high expression in several types of tumors making it a potential target for therapeutic antibodies like anti-TROP2 anti trop2 or anti-TROP-2. |
| **Biological function summary** | TROP2 mediates calcium signaling and cell proliferation. It functions by being a part of a signaling complex on the cell membrane which affects multiple cellular activities such as cell growth motility and survival. Its role in maintaining the integrity of the epithelial cell layer also shows TROP2's significance in normal tissue homeostasis. The interaction of TROP2 with the extracellular matrix and other cell surface proteins support the structural integrity and communication between cells. |
| **Pathways** | TROP2 plays a central role in the PI3K/AKT and MAPK signaling pathways that regulate cell growth and survival. Within these pathways TROP2 works in concert with proteins like ERK and AKT important for transmitting extracellular signals into appropriate cellular responses. These pathways are key regulators of many physiological processes including cell cycle progression and apoptosis prevention. |

| | |
|---|---|
| **Associated diseases and disorders** | TROP2 is strongly associated with several types of cancers particularly epithelial cancers like breast and pancreatic cancer. Overexpression of TROP2 in tumors often correlates with poor prognosis and aggressive disease phenotypes. Interaction between TROP2 and proteins like EGFR in cancer cell signaling pathways amplifies tumor progression and metastasis. Understanding these associations makes TROP2 a significant target in developing therapeutic strategies for cancer treatment. |

## Product promise

**Tested**

We have tested this species and application combination and it works. It is covered by our product promise.

**Expected**

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

**Predicted**

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

**Not recommended**

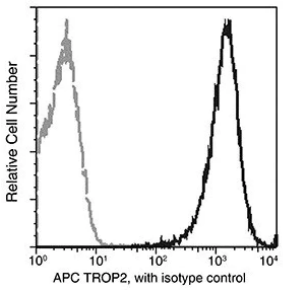
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

## 1 product image




### Flow Cytometry - APC Anti-TROP2 antibody [001] (ab275727)

TROP2 Flow Cytometry staining using rabbit Anti-TROP2 antibody

Flow cytometric analysis of ab275727 at 10 µl/Test on MCF7 (Human breast adenocarcinoma cell line) cells.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.