abcam

ab133568

Anti-TCTP antibody [EPR5540]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.05% Sodium azide Constituents: 50% Tissue culture supernatant, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR5540
Purification technique	Affinity purification Protein A
Concentration	0.114 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/10000 - 1/50000
Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/250 - 1/500
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/100 - 1/1000
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information TCTP

Function	Involved in calcium binding and microtubule stabilization (PubMed:12167714, PubMed:15162379, PubMed:15958728). Acts as a negative regulator of TSC22D1-mediated apoptosis, via interaction with and destabilization of TSC22D1 protein (PubMed:18325344).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Storage information	Stable for 12 months at -20°C

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Supplementary info

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

Activity summary	TCTP also known as Translationally Controlled Tumor Protein or histamine-releasing factor (HRF) is a multifunctional protein with a molecular mass of approximately 19 kDa. It is found in a variety of tissues and cell types including cytoplasm and extracellular environments. The protein engages in cellular processes such as cell growth development and apoptosis. TCTP regulates microtubule stability cell cycle progression and protein synthesis reflecting its broad mechanical roles within cells.
Biological function summary	In both animal and human cells TCTP acts as a prosurvival factor by inhibiting apoptosis. It binds with proteins like Bcl-2 and Bax playing a role in the regulation

	of cell death. Furthermore TCTP appears to mediate immune responses through its histamine-releasing factor activity. It interacts within protein complexes that manage cytoskeletal dynamics and stress responses contributing to cellular adaptability.
Pathways	The protein interacts in critical pathways such as the MAPK signaling pathway and the apoptosis pathway. In the MAPK pathway TCTP modulates cell growth and proliferation by interacting with proteins like ERK1/2. In the apoptosis pathway TCTP's interaction with Bcl-xL and Bax highlights its role in the fine-tuning of cell survival and death processes. These pathways highlight its participation in essential cellular functions and disease progression.
Associated diseases and disorders	TCTP has implications in cancer and allergy. Altered expression and function of TCTP have been linked to tumor growth and resistance to cancer therapies often regulated through complex interactions with proteins like p53. In allergies its role in histamine release positions it as a mediator in allergic asthma and other hypersensitivity reactions. These associations emphasize the clinical relevance of TCTP and its potential as a therapeutic target.

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

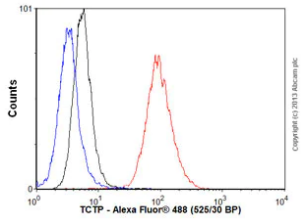
We do not recommend this combination. It is not covered by our product promise.

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.

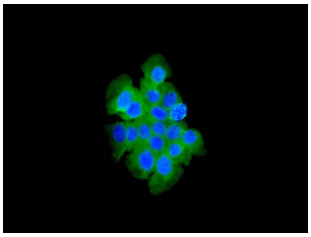
3 product images



Flow Cytometry (Intracellular) - Anti-TCTP antibody [EPR5540] (ab133568)

TCTP Flow Cytometry (Intracellular) staining using rabbit Anti-TCTP antibody

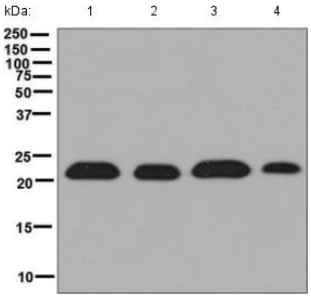
Overlay histogram showing A431 cells stained with ab133568 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab133568, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) (ab150077) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.



Immunocytochemistry/ Immunofluorescence - Anti-TCTP antibody [EPR5540] (ab133568)

TCTP Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-TCTP antibody

Immunofluorescence analysis of A431 cells staining TCTP (green) using ab133568 at a 1/250 dilution. Cell nuclei are shown in blue.



Western blot - Anti-TCTP antibody [EPR5540] (ab133568)

All lanes:
Western blot - Anti-TCTP antibody [EPR5540] (ab133568) at 1/10000 dilution

Lane 1:
Raji cell lysate at 10 µg

Lane 2:
HeLa cell lysate at 10 µg

Lane 3:
Jurkat cell lysate at 10 µg

Lane 4:
A431 cell lysate at 10 µg

Secondary

All lanes:
Standard HRP labelled goat anti-rabbit at 1/2000 dilution

Developed using the ECL technique.

Predicted band size: 20 kDa

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