abcam

ab167167

Anti-OTOP2 antibody [EPR9484]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR9484
Purification technique	Affinity purification Protein A
Concentration	0.289 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000 - 1/10000
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/10 - 1/100
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 Proton channel OTOP2

Function	Proton-selective ion channel open at neutral pH. Active at neutral and alkaline extracellular pH, likely participates in some alkali-related physiological activities.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot

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	The protein OTOP2 also known as Otopetrin 2 is involved in proton channel activity. It has an approximate molecular mass of 70 kDa. OTOP2 expresses in various tissues including the vestibular system and other sensory organs. Its role involves contributing to chemical gradients helping with cellular processes within these systems. This expression pattern points to its relevance in sensory functions mainly in maintaining balance and spatial orientation.
Biological function summary	OTOP2 influences ion balance in cells. This protein participates in cellular activities by modulating pH and ionic concentrations. OTOP2 often functions on its own without being part of larger protein complexes to achieve its regulatory roles. Its activity ensures cells maintain an environment that supports normal cellular operations and signaling particularly in response to external stimuli.
Pathways	OTOP2 plays a role in ion transport and sensory perception pathways. It aligns with key proteins involved in sensory signaling such as OTOP1 and OTOP3 which participate in similar sensory activities. This association indicates that OTOP2 functions in the contribution to sensory signal transduction. The involvement in these pathways highlights its importance in the body's response to sensory input and environmental changes.
Associated diseases and disorders	OTOP2 connects to balance disorders like vestibular dysfunctions. Such conditions are due to the malfunction of sensory signaling related to balance. Proteins such as OTOP1 are similarly linked in these disorders emphasizing their collective importance in vestibular health. Additionally understanding how OTOP2 works can inform research into improved treatments for these conditions.

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

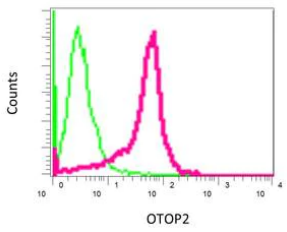
We do not recommend this combination. It is not covered by our product promise.

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.

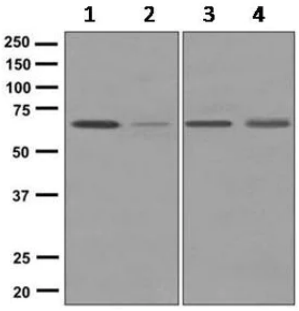
2 product images



Flow Cytometry (Intracellular) - Anti-OTOP2 antibody [EPR9484] (ab167167)

OTOP2 Flow Cytometry (Intracellular) staining using rabbit Anti-OTOP2 antibody

Intracellular flow cytometric analysis of permeabilized U-87 MG cells labeling OTOP2 with ab167167 (red) or a rabbit IgG (negative) (green).



Western blot - Anti-OTOP2 antibody [EPR9484] (ab167167)

All lanes:
Western blot - Anti-OTOP2 antibody [EPR9484] (ab167167) at 1/1000 dilution

Lane 1:
Human fetal heart lysates at 10 µg

Lane 2:
Human spleen lysates at 10 µg

Lane 3:
U-87MG cell lysates at 10 µg

Lane 4:
Human fetal thymus lysates at 10 µg

Secondary

All lanes:
Goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 62 kDa

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