abcam

ab248641

Anti-CLPTM1 antibody [EPR8800] - BSA and Azide free

Recombinant | RabMAb | KO Validated

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR8800
Purification technique	Affinity purification Protein A
Dissociation constant	3.45 x 10^{-11} M

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	-
Notes	

Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

IP

Not recommended

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information CLPTM1

Function	Involved in GABAergic but not glutamatergic transmission. Binds and traps GABAA receptors in the endoplasmic reticulum (ER). Modulates postsynaptic GABAergic transmission, and therefore inhibitory neurotransmission, by reducing the plasma membrane expression of these receptors. Altered GABAergic signaling is one among many causes of cleft palate (By similarity). Might function as a lipid scramblase, translocating lipids in membranes from one leaflet to the other one (By similarity). Required for efficient glycosylphosphatidylinositol (GPI) inositol deacylation in the ER, which is a crucial step to switch GPI-anchored proteins (GPI-APs) from protein folding to transport states (PubMed:29255114). May play a role in T-cell development (By similarity).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab248641 is the carrier-free version of ab133756.

Species reactivity

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

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.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

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

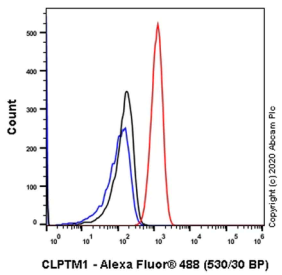
We do not recommend this combination. It is not covered by our product promise.

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



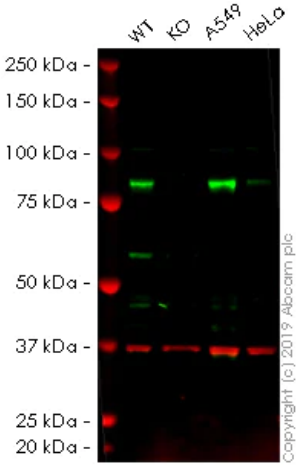
Flow Cytometry (Intracellular) - Anti-CLPTM1 antibody [EPR8800] - BSA and Azide free (ab248641)

CLPTM1 Flow Cytometry (Intracellular) staining using rabbit Anti-CLPTM1 antibody

This data was developed using ab133756, the same antibody clone in a different buffer formulation.

Flow Cytometry analysis of A549 (Human lung carcinoma epithelial cell) cells labeling CLPTM1 with purified ab133756 at 1/200 dilution (1 µg/mL) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG

(Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Western blot - Anti-CLPTM1 antibody [EPR8800] - BSA and Azide free (ab248641)

Lanes 1 - 4: Merged signal (red and green). Green - ab133756 observed at 76 kDa. Red - loading control, ab8245, observed at 37 kDa.
ab133756 was shown to recognize in wild-type HAP1 cells as signal was lost at the expected MW in CLPTM1 knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and CLPTM1 knockout samples were subjected to SDS-PAGE. The membrane was blocked with 3pc Milk. ab133756 and ab8245 (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab133756).

All lanes:
Western blot - Anti-CLPTM1 antibody [EPR8800] (ab133756) at 1/1000 dilution

Lane 1:
Wild-type HAP1 whole cell lysate at 20 µg

Lane 2:
CLPTM1 knockout HAP1 whole cell lysate at 20 µg

Lane 3:
A549 whole cell lysate at 20 µg

Lane 4:
HeLa whole cell lysate at 20 µg

Predicted band size: 76 kDa

Observed band size: 76 kDa

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