abcam

ab133756

Anti-CLPTM1 antibody [EPR8800]

Recombinant | RabMAb | KO Validated

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	EPR8800
Purification technique	Affinity purification Protein A
Dissociation constant	3.45 x 10^{-11} M
Concentration	0.287 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/50 - 1/100
Notes	-

IP

Not recommended

Species	Human
Dilution info	-
Notes	-

WB

Tested

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

ICC/IF

Tested

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

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/200
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

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	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

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.

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.

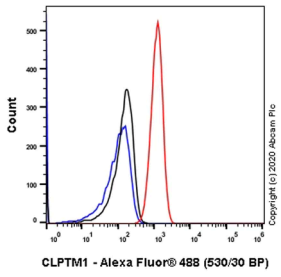
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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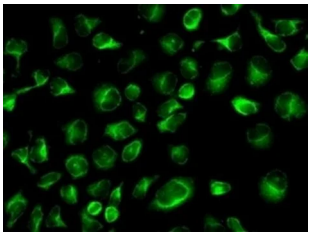
6 product images



Flow Cytometry (Intracellular) - Anti-CLPTM1 antibody [EPR8800] (ab133756)

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

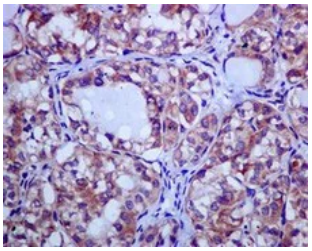
Flow Cytometry analysis of A549 (Human lung carcinoma epithelial cell) cells labeling CLPTM1 with purified ab133756 at 1/200 dilution (1 µg/mL) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunocytochemistry/ Immunofluorescence - Anti-CLPTM1 antibody [EPR8800] (ab133756)

CLPTM1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CLPTM1 antibody

Immunofluorescent staining of HeLa cells labelling CLPTM1 with ab133756 at 1/250.

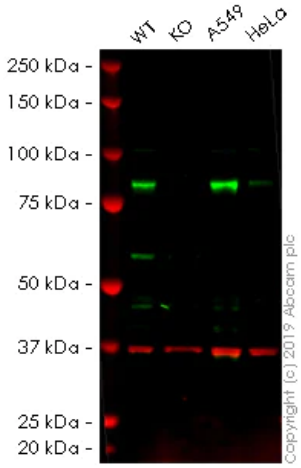


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CLPTM1 antibody [EPR8800] (ab133756)

CLPTM1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CLPTM1 antibody

Immunohistochemical analysis of paraffin embedded papillary adenocarcinoma of Human thyroid gland tissue labelling CLPTM1 with ab133756 at 1/50.

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



Western blot - Anti-CLPTM1 antibody [EPR8800] (ab133756)

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.

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

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

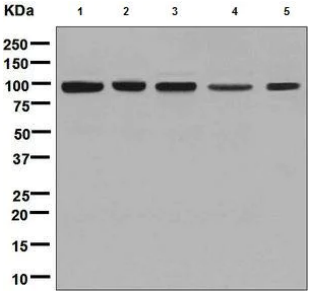
Lane 2:
CLPTM1 knockout HAP1 whole cell lysate at 20 µg

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



Western blot - Anti-CLPTM1 antibody [EPR8800] (ab133756)

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

Lane 1:
HeLa cell lysate at 10 µg

Lane 2:
293T cell lysate at 10 µg

Lane 3:
U87 MG cell lysate at 10 µg

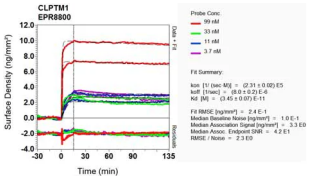
Lane 4:
HepG2 cell lysate at 10 µg

Lane 5:
Jurkat cell lysate at 10 µg

Secondary

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

Predicted band size: 76 kDa



OI-RD Scanning - Anti-CLPTM1 antibody [EPR8800] (ab133756)

We have systematically measured KD (the equilibrium dissociation constant between the antibody and its antigen), of more than 840 recombinant antibodies to assess not only their individual KD values but also to see the average affinity of antibody. Based on the comparison with published literature values for mouse monoclonal antibodies, Recombinant antibodies appear to be on average 1-2 order of magnitude higher affinity.

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