abcam

Product datasheet

Anti-CLIC1 antibody [EPR22907-50] - BSA and Azide free ab256514

Recombinant RabMAb

6 Images

Overview

Product name	Anti-CLIC1 antibody [EPR22907-50] - BSA and Azide free
Description	Rabbit monoclonal [EPR22907-50] to CLIC1 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt, ICC/IF, IP, WB **Unsuitable for:** IHC-P
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Recombinant fragment within Human CLIC1 aa 1 to the C-terminus. The exact sequence is proprietary. Database link: O00299
Positive control	WB: Human fetal heart, kidney and spleen lysates, K-562, C2C12, U-87 MG and MDA-MB-231 whole cell lysates, Mouse kidney and spleen lysates, Rat spleen lysate, C6 and RAW 264.7 whole cell lysates;ICC/IF: C2C12 and K-562 cells; Flow Cyt: K-562 and C2C12;IP: Mouse placenta lysate.
General notes	Ab256514 is the carrier-free version of ab229917. This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes. Our carrier-free formats are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency. 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. ab256514 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm. *Maxpar® is a trademark of Fluidigm Canada Inc.* 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 production For more information see here.

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

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR22907-50
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab256514** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.

Application	Abreviews	Notes
IP		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 27 kDa (predicted molecular weight: 27 kDa).

Application notes Is unsuitable for IHC-P.

Target

Function Can insert into membranes and form chloride ion channels. Channel activity depends on the pH. Membrane insertion seems to be redox-regulated and may occur only under oxydizing conditions. Involved in regulation of the cell cycle.

Tissue specificity Expression is prominent in heart, placenta, liver, kidney and pancreas.

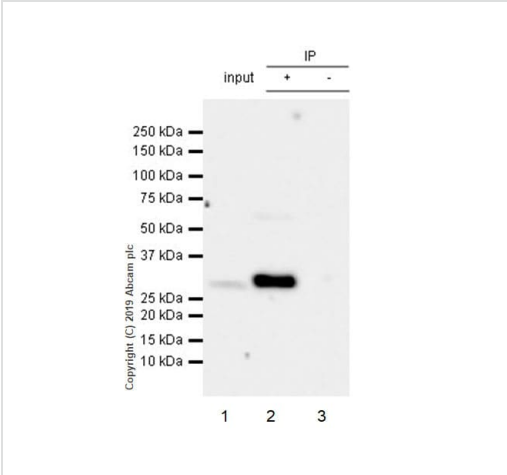
Sequence similarities Belongs to the chloride channel CLIC family.
Contains 1 GST C-terminal domain.

Domain Members of this family may change from a globular, soluble state to a state where the N-terminal domain is inserted into the membrane and functions as chloride channel. A conformation change of the N-terminal domain is thought to expose hydrophobic surfaces that trigger membrane insertion.

Post-translational modifications Hydrogen peroxide treatment causes a conformation change, leading to dimerization and formation of an intramolecular disulfide bond between Cys-24 and Cys-59.

Cellular localization Nucleus. Nucleus membrane. Cytoplasm. Cell membrane. Mostly in the nucleus including in the nuclear membrane. Small amount in the cytoplasm and the plasma membrane. Exists both as soluble cytoplasmic protein and as membrane protein with probably a single transmembrane domain.

Images



Immunoprecipitation - Anti-CLIC1 antibody [EPR22907-50] - BSA and Azide free (ab256514)

CLIC1 was immunoprecipitated from 0.35mg Mouse placenta lysate with ab229917 at 1/30 dilution (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab229917 at 1/1000 dilution (0.5 µg/ml). VeriBlot for IP Detection Reagent (HRP) (ab131366) was used as the secondary antibody at 1/5000 dilution.

Lane 1: Mouse placenta lysate 10µg

Lane 2: ab229917 IP in Mouse placenta lysate

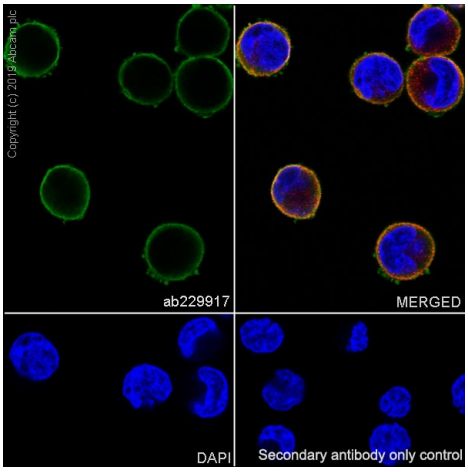
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab229917 in Mouse placenta lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 30 seconds.

This data was developed using the same antibody clone in a

different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab229917).

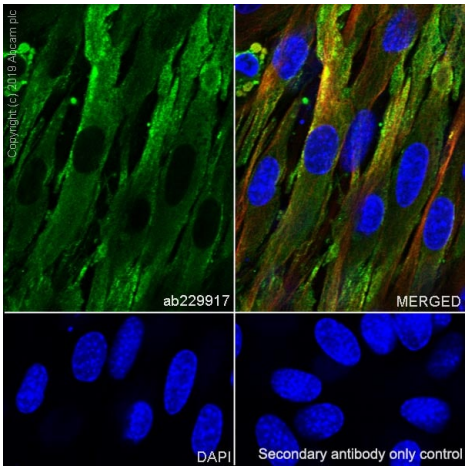


Immunocytochemistry/ Immunofluorescence - Anti-CLIC1 antibody [EPR22907-50] - BSA and Azide free (ab256514)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized K562 (human chronic myelogenous leukemia lymphoblast) cells labelling CLIC1 with at 1/100 dilution, followed by ab150077 AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 dilution (Green). Confocal image showing membranous staining in K-562 cell line. ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ab150077 AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab229917).

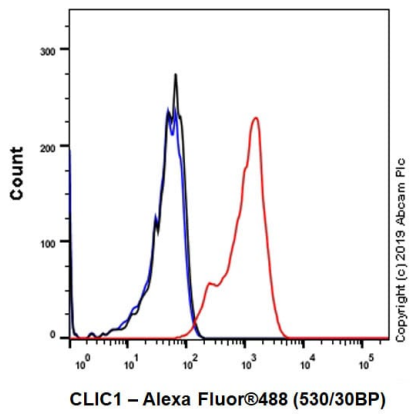


Immunocytochemistry/ Immunofluorescence - Anti-CLIC1 antibody [EPR22907-50] - BSA and Azide free (ab256514)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized C2C12 (mouse myoblasts myoblast) cells labelling CLIC1 with at 1/100 dilution, followed by ab150077 AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic and membranous staining in C2C12 cell line. ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ab150077 AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 dilution.

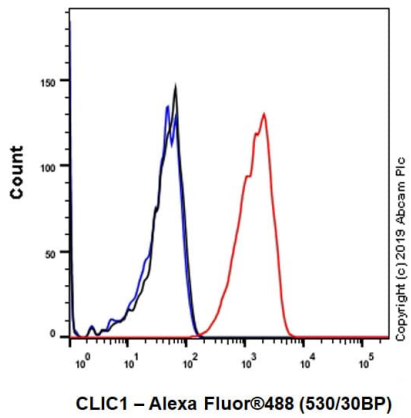
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab229917).



Flow Cytometry - Anti-CLIC1 antibody [EPR22907-50] - BSA and Azide free (ab256514)

Flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized K-562 (Human chronic myelogenous leukemia lymphoblast) cells labelling CLIC1 with ab229917 at 1/500 dilution (0.1µg) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.

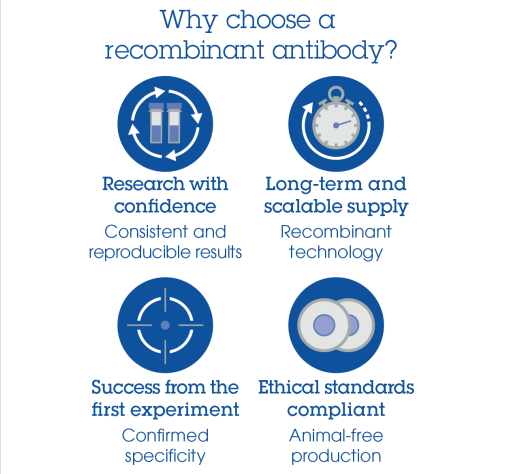
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab229917).



Flow Cytometry - Anti-CLIC1 antibody [EPR22907-50] - BSA and Azide free (ab256514)

Flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized C2C12 (Mouse myoblasts myoblast) cells labelling CLIC1 with ab229917 at 1/500 dilution (0.1µg) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab229917).



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Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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