abcam

Product datasheet

Anti-CLIC1 antibody [EPR22907-50] ab229917



★★★★★ 1 Abreviews 9 Images

Overview

Product name Anti-CLIC1 antibody [EPR22907-50]

Description Rabbit monoclonal [EPR22907-50] to CLIC1

Host species Rahhit

Tested applications Suitable for: Flow Cyt (Intra), WB, ICC/IF, IP

Unsuitable for: IHC-P

Species reactivity Reacts with: Mouse. Rat. Human

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

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 (intra): K-562 and C2C12; IP: Mouse

placenta lysate.

General notes 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**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal

Clone number EPR22907-50

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab229917 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 (Intra)		1/500.
WB		1/1000. Detects a band of approximately 27 kDa (predicted molecular weight: 27 kDa).
ICC/IF		1/100.
IP		1/30.

Application notes Is unsuitable for IHC-P.

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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 similaritiesBelongs 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

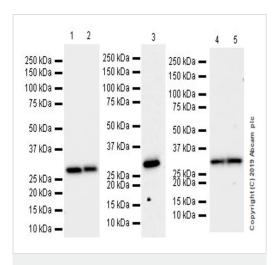
formation of an intramolecular disulfide bond between Cys-24 and Cys-59.

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



Western blot - Anti-CLIC1 antibody [EPR22907-50] (ab229917)

All lanes : Anti-CLIC1 antibody [EPR22907-50] (ab229917) at 1/1000 dilution

Lane 1: Mouse kidney lysate

Lane 2: Mouse spleen lysate

Lane 3: Rat spleen lysate

Lane 4: C6 (rat glial tumor glial cell) whole cell lysate

Lane 5: RAW 264.7 (mouse abelson murine leukemia virus-

induced tumor macrophage) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

Predicted band size: 27 kDa Observed band size: 27 kDa

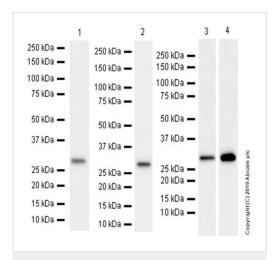
Exposure times.

Lanes 1-2: 15 seconds;

Lane 3: 3 minutes;

Lanes 4-5: 48 seconds.

Blocking buffer and concentration: 5% NFDM/TBST.



Western blot - Anti-CLIC1 antibody [EPR22907-50] (ab229917)

All lanes : Anti-CLIC1 antibody [EPR22907-50] (ab229917) at 1/1000 dilution

Lane 1: K-562 (human chronic myelogenous leukemia lymphoblast) whole cell lysate

Lane 2: C2C12 (mouse myoblasts myoblast) whole cell lysate

Lane 3: U-87 MG (human glioblastoma-astrocytoma epithelial cell)

whole cell lysate

Lane 4 : MDA-MB-231 (human breast adenocarcinoma epithelial cell) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit $\lg G \ H\&L \ (HRP) \ (\underline{ab97051})$ at 1/100000 dilution

Predicted band size: 27 kDa **Observed band size:** 27 kDa

Blocking/Diluting buffer and concentration: 5% NFDM/TBST

Exposure times.

Lane 1:26 seconds;

Lane 2:10 seconds;

Lanes 3-4: 3 minutes.

All lanes : Anti-CLIC1 antibody [EPR22907-50] (ab229917) at 1/1000 dilution

Lane 1: Human fetal heart lysate

Lane 2: Human fetal kidney lysate

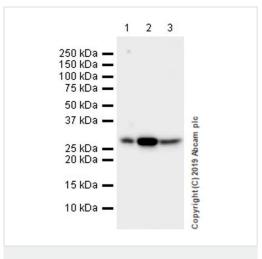
Lane 3: Human fetal spleen lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>) at 1/1000 dilution

Predicted band size: 27 kDa **Observed band size:** 27 kDa



Western blot - Anti-CLIC1 antibody [EPR22907-50]

(ab229917)

Exposure time: 15 seconds

Blocking and dilution buffer: 5% NFDM/TBST.

CLIC1 was immunoprecipitated from 0.35mg Mouse placenta lysate with ab229917 at 1/30 dilution (2 μ g in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab229917 at 1/1000 dilution (0.5 μ g/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 lgG (<u>ab172730</u>) instead of ab229917 in Mouse placenta lysate.

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

Exposure time: 30 seconds.

250 KDa —
150 KDa —
150 KDa —
150 KDa —
75 kDa —
50 kDa —
9d wwwy stz 25 kDa —
220 kDa —
220 kDa —
20 kDa —
110 kDa —
110 kDa —
12 3

Immunoprecipitation - Anti-CLIC1 antibody [EPR22907-50] (ab229917)

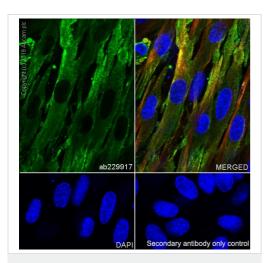
ab229917 MERGED

DAPI Secondary antibody only control

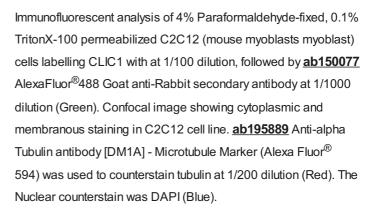
Immunocytochemistry/ Immunofluorescence - Anti-CLIC1 antibody [EPR22907-50] (ab229917)

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).

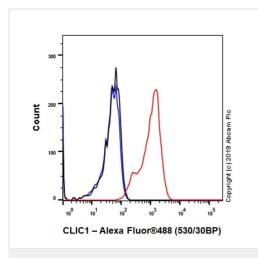
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is <u>ab150077</u> AlexaFluor[®]488 Goat anti-Rabbit secondary at 1/1000 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-CLIC1 antibody [EPR22907-50] (ab229917)

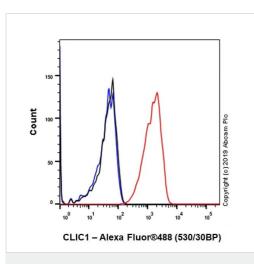


Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is <u>ab150077</u> AlexaFluor[®]488 Goat anti-Rabbit secondary at 1/1000 dilution.

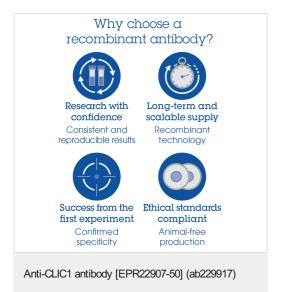


Flow Cytometry (Intracellular) - Anti-CLIC1 antibody [EPR22907-50] (ab229917)

Intracellular 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 (0.1 \(\frac{1}{2}\)\(\frac{1}{2}\)g) (Red) compared with a Rabbit monoclonal lgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit lgG (Alexa Fluor \(\frac{1}{2}\)\(\frac{1}{2}\)488, ab150077) at 1/2000 dilution was used as the secondary antibody.



Flow Cytometry (Intracellular) - Anti-CLIC1 antibody [EPR22907-50] (ab229917)



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