abcam

ab303518

Anti-NKCC1 antibody [EPR26256-60]

Anti-NKCC1 antibody [EPR26256-60] (ab303518) is a rabbit monoclonal antibody detecting NKCC1 in **Western Blot, Flow Cytometry (Intra), IP, IHC-P, ICC/IF**. Suitable for **Human, Mouse, Rat**.

- Biophysical QC for unrivalled batch-batch consistency

Recombinant | RabMAb | 20ul selling size

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	EPR26256-60
Purification technique	Affinity purification Protein A
Concentration	0.489 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/1000

Notes	-

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Rat
Dilution info	1/1000
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/100
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Mouse
Dilution info	1/100
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Rat
Dilution info	1/100
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

IHC-Fr

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/100
Notes	-

Species	Mouse
Dilution info	1/100
Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	1/50
Notes	-

Expected

Species	Human, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

IP

Tested

Species	Human
Dilution info	1/30

Notes	-

Species	Rat
Dilution info	1/30
Notes	-

Species	Mouse
Dilution info	1/30
Notes	-

Target data

See full target information SLC12A2

Function	Cation-chloride cotransporter which mediates the electroneutral transport of chloride, potassium and/or sodium ions across the membrane (PubMed:16669787, PubMed:32081947, PubMed:32294086, PubMed:33597714, PubMed:35585053, PubMed:36239040, PubMed:36306358, PubMed:7629105). Plays a vital role in the regulation of ionic balance and cell volume (PubMed:16669787, PubMed:32081947, PubMed:32294086, PubMed:7629105).

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
Storage information	Avoid freeze / thaw cycle

Notes

What is this antibody validated in?

Anti-NKCC1 antibody [EPR26256-60] (ab303518) is a rabbit recombinant monoclonal antibody and is validated for use in Western Blot (WB), Flow Cytometry (Intra), Flow Cytometry (Flow Cyt), Immunoprecipitation (IP),

Immunohistochemistry (IHC-P), Immunocytochemistry/immunofluorescence (ICC/IF) in Human, Mouse, Rat samples.

What is the molecular weight of NKCC1?
Anti-NKCC1 [EPR26256-60] (ab303518) specifically detects a band for NKCC1 (UniProt: P55012) at a molecular weight of 131kDa.

Other related products
We have a range of other formats of antibody clone [EPR26256-60] also available for your convenience: ab303518, Carrier free - ab303519

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.

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.

Trial sizes available!
Test your antibody or perform pre-screening before committing to a larger quantity. Sold in 20µl. Discover our selection of trial-size 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

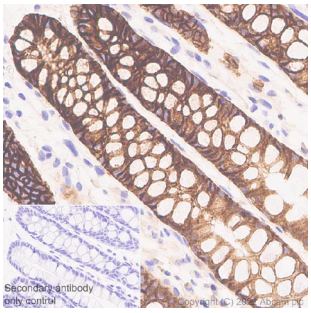
We do not recommend this combination. It is not covered by our product promise.

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.

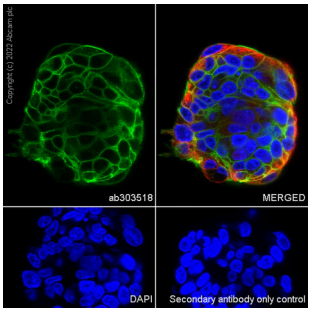
Full details and terms and conditions can be found here:
Terms & Conditions.

14 product images



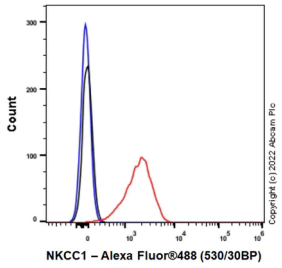
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NKCC1 antibody [EPR26256-60] (ab303518)

Immunohistochemical analysis of paraffin-embedded Human colon tissue labeling NKCC1 with ab303518 at 1/100 (4.89 ug/ml) followed by a ready to use LeicaDS9800 (Bond☒ Polymer Refine Detection) was used. Positive staining on human colon(PMID: 17478539).The section was incubated with ab303518 for 30 mins at room temperature.The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond☒ Polymer Refine Detection).Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



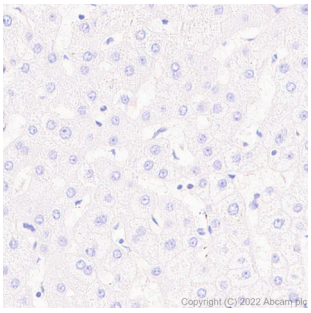
Immunocytochemistry/ Immunofluorescence - Anti-NKCC1 antibody [EPR26256-60] (ab303518)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized T84 (human colon epithelial cell) cells labelling NKCC1 with ab303518 at 1/100 (4.89 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2 ug/ml dilution (Green). Confocal image showing mainly membranous staining in T84 cell line. The image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). is observed. ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5 ug/ml dilution (Red). The Nuclear counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/ml dilution.



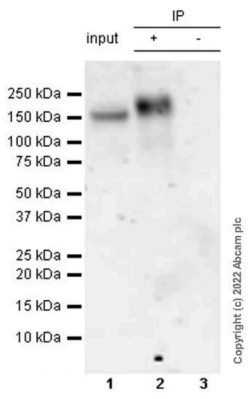
Flow Cytometry - Anti-NKCC1 antibody [EPR26256-60] (ab303518)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized T84 (human colon epithelial cell) cells labelling NKCC1 with ab303518 at 1/50 dilution (1ug) (Red) (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, ab150081) at 1/2000 dilution was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NKCC1 antibody [EPR26256-60] (ab303518)

Immunohistochemical analysis of paraffin-embedded Human liver tissue labeling NKCC1 with ab303518 at 1/100 (4.89 ug/ml) followed by a ready to use LeicaDS9800 (Bond Polymer Refine Detection) was used. Negative control: No staining on human liver.The section was incubated with ab303518 for 30 mins at room temperature.The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond Polymer Refine Detection).Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Immunoprecipitation - Anti-NKCC1 antibody [EPR26256-60] (ab303518)

NKCC1 was immunoprecipitated from 0.35 mg human cerebellum tissue lysate 10 ug with ab303518 at 1/30 dilution (2 µg in 0.35 mg lysates). Western blot was performed on the immunoprecipitate using ab303518. VeriBlot for IP secondary antibody (HRP) (ab131366) was used at 1/5000 dilution. Lane 1: human cerebellum tissue lysate 10 µg (Inset) Lane 2: ab303518 IP in human cerebellum tissue lysate Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab303518 in human cerebellum tissue lysate Blocking and dilution buffer and concentration: 5% NFDM/TBST.
Exposure time: 3 minutes
All lanes:
Immunoprecipitation - Anti-NKCC1 antibody [EPR26256-60] (ab303518) at 1/30 dilution

Lane 1:
human cerebellum tissue lysate at 10 µg

Lane 2:
ab303518 IP in human cerebellum tissue lysate

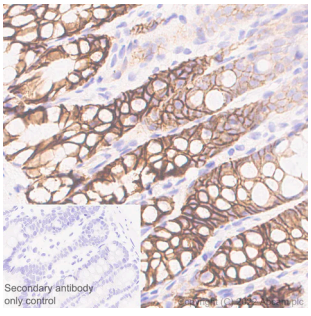
Secondary

All lanes:
Immunoprecipitation - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 dilution

Predicted band size: 131 kDa

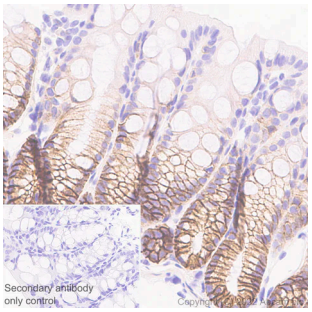
Observed band size: 150 kDa

Exposure time: 3min



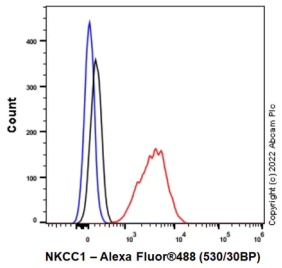
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NKCC1 antibody [EPR26256-60] (ab303518)

Immunohistochemical analysis of paraffin-embedded Rat colon tissue labeling NKCC1 with ab303518 at 1/2000 (4.89 ug/ml) followed by a ready to use LeicaDS9800 (Bond Polymer Refine Detection) was used. Positive staining on rat colon.The section was incubated with ab303518 for 30 mins at room temperature.The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond Polymer Refine Detection).Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



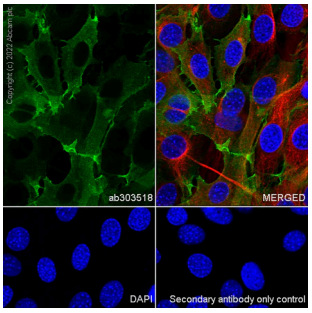
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NKCC1 antibody [EPR26256-60] (ab303518)

Immunohistochemical analysis of paraffin-embedded Mouse colon tissue labeling NKCC1 with ab303518 at 1/2000 (4.89 ug/ml) followed by a ready to use LeicaDS9800 (Bond Polymer Refine Detection) was used. Positive staining on mouse colon.The section was incubated with ab303518 for 30 mins at room temperature.The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond Polymer Refine Detection).Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



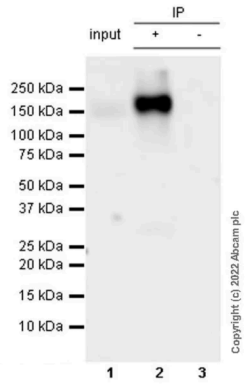
Flow Cytometry - Anti-NKCC1 antibody [EPR26256-60] (ab303518)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized NIH/3T3 (mouse embryonic fibroblast) cells labelling NKCC1 with ab303518 at 1/50 dilution (1ug) (Red) (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, ab150081) at 1/2000 dilution was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-NKCC1 antibody [EPR26256-60] (ab303518)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized NIH/3T3 (mouse embryonic fibroblast) cells labelling NKCC1 with ab303518 at 1/100 (4.89 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2 ug/ml dilution (Green). Confocal image showing membranous and cytoplasmic staining in NIH/3T3 cell line. The image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). is observed. ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5 ug/ml dilution (Red). The Nuclear counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/ml dilution.



Immunoprecipitation - Anti-NKCC1 antibody [EPR26256-60] (ab303518)

NKCC1 was immunoprecipitated from 0.35 mg rat brain tissue lysate 10 ug with ab303518 at 1/30 dilution (2 µg in 0.35 mg lysates). Western blot was performed on the immunoprecipitate using ab303518. VeriBlot for IP secondary antibody (HRP) (ab131366) was used at 1/5000 dilution. Lane 1: rat brain tissue lysate 10 µg (Inset) Lane 2: ab303518 IP in rat brain tissue lysate Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab303518 in rat brain tissue lysate Blocking and dilution buffer and concentration: 5% NFDM/TBST. Exposure time: 23 seconds.
All lanes:
Immunoprecipitation - Anti-NKCC1 antibody [EPR26256-60] (ab303518) at 1/30 dilution

Lane 1:
Rat brain tissue lysate at 10 µg

Lane 2:
ab303518 IP in rat brain tissue lysate

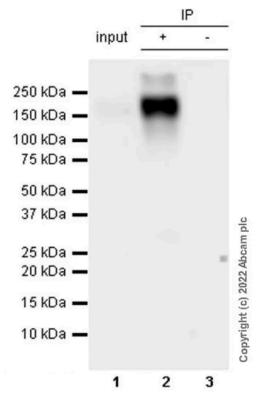
Secondary

All lanes:
Immunoprecipitation - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 dilution

Predicted band size: 131 kDa

Observed band size: 150 kDa

Exposure time: 23s



Immunoprecipitation - Anti-NKCC1 antibody [EPR26256-60] (ab303518)

NKCC1 was immunoprecipitated from 0.35 mg mouse brain tissue lysate 10 ug with ab303518 at 1/30 dilution (2 µg in 0.35 mg lysates). Western blot was performed on the immunoprecipitate using ab303518 at dilution. VeriBlot for IP secondary antibody (HRP)(ab131366) was used at 1/5000 dilution. Lane 1: mouse brain tissue lysate 10 µg (Inset) Lane 2: ab303518 IP in mouse brain tissue lysate Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab303518 in mouse brain tissue lysate Blocking and dilution buffer and concentration: 5% NFDM/TBST. Exposure time: 15 seconds.
All lanes:
Immunoprecipitation - Anti-NKCC1 antibody [EPR26256-60] (ab303518) at 1/30 dilution

Lane 1:
Mouse brain tissue lysate at 10 µg

Lane 2:
ab303518 IP in mouse brain tissue lysate

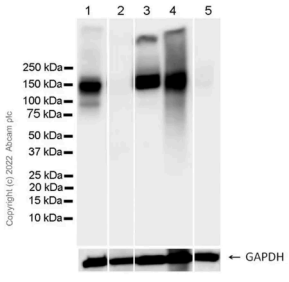
Secondary

All lanes:
Immunoprecipitation - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 dilution

Predicted band size: 131 kDa

Observed band size: 150 kDa

Exposure time: 15s



Western blot - Anti-NKCC1 antibody [EPR26256-60] (ab303518)

Blocking / diluting buffer and concentration: 5% NFDM/TBST Low expression: liver (human protein atlas database)
All lanes:
Western blot - Anti-NKCC1 antibody [EPR26256-60] (ab303518) at 1/1000 dilution

Lane 1:
Human cerebellum tissue lysate at 20 µg

Lane 2:
Human liver tissue lysate at 20 µg

Lane 3:
Mouse brain tissue lysate at 20 µg

Lane 4:
Mouse colon cancer tissue lysate at 20 µg

Lane 5:
Mouse liver tissue lysate at 20 µg

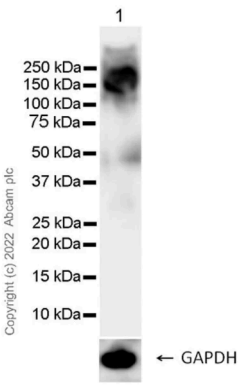
Secondary

All lanes:
Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human Ig at 1/2000 dilution

Predicted band size: 131 kDa

Observed band size: 150 kDa

Exposure time: 3s



Western blot - Anti-NKCC1 antibody [EPR26256-60] (ab303518)

NKCC1 Western blot staining of Rat brain tissue lysate using rabbit Anti-NKCC1 antibody

Blocking / diluting buffer and concentration: 5% NFDM/TBST
All lanes:
Western blot - Anti-NKCC1 antibody [EPR26256-60] (ab303518) at 1/1000 dilution

All lanes:
Rat brain tissue lysate at 20 µg

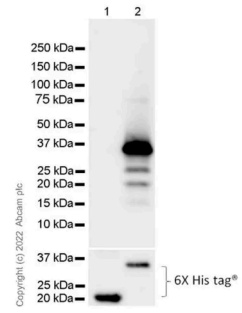
Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/50000 dilution

Predicted band size: 131 kDa

Observed band size: 150 kDa

Exposure time: 8s



Western blot - Anti-NKCC1 antibody [EPR26256-60] (ab303518)

Blocking / diluting buffer and concentration: 5% NFDM/TBST This antibody does not cross-react with mouse NKCC2.
All lanes:
Western blot - Anti-NKCC1 antibody [EPR26256-60] (ab303518) at 1/1000 dilution

Lane 1:
His-tagged mouse NKCC2 recombinant protein at 10 ng

Lane 2:
His-tagged mouse NKCC1 recombinant protein at 10 ng

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/50000 dilution

Predicted band size: 131 kDa

Observed band size: 30 kDa

Exposure time: 26s

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