

CLCN1 Antibody (N-Term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22311a**Specification**

CLCN1 Antibody (N-Term) - Product Information

Application	WB, FC,E
Primary Accession	P35523
Reactivity	Human, Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	108626

CLCN1 Antibody (N-Term) - Additional Information**Gene ID** 1180**Other Names**

Chloride channel protein 1, CIC-1, Chloride channel protein, skeletal muscle, CLCN1, CLC1

Target/Specificity

This CLCN1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 32-66 amino acids from the human region of human CLCN1.

Dilution

WB~~1:2000

FC~~1:25

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CLCN1 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

CLCN1 Antibody (N-Term) - Protein Information**Name** CLCN1 {ECO:0000303|PubMed:8533761, ECO:0000312|HGNC:HGNC:2019}**Function** Voltage-gated chloride channel involved in skeletal muscle excitability. Generates most of the plasma membrane chloride conductance in skeletal muscle fibers, stabilizes the resting

membrane potential and contributes to the repolarization phase during action potential firing (PubMed:[12456816](#), PubMed:[16027167](#), PubMed:[22521272](#), PubMed:[22641783](#), PubMed:[26007199](#), PubMed:[26502825](#), PubMed:[26510092](#), PubMed:[7951242](#), PubMed:[8112288](#), PubMed:[8130334](#), PubMed:[9122265](#), PubMed:[9565403](#), PubMed:[9736777](#)). Forms a homodimeric channel where each subunit has its own ion conduction pathway. Conducts double-barreled currents controlled by two types of gates, two fast glutamate gates that control each subunit independently and a slow common gate that opens and shuts off both subunits simultaneously. Has a significant open probability at muscle resting potential and is further activated upon membrane depolarization (PubMed:[10051520](#), PubMed:[10962018](#), PubMed:[29809153](#), PubMed:[31022181](#)). Permeable to small monovalent anions with ion selectivity for chloride > thiocyanate > bromide > nitrate > iodide (PubMed:[9122265](#), PubMed:[9565403](#)).

Cellular Location

Cell membrane; Multi-pass membrane protein Cell membrane, sarcolemma {ECO:0000250|UniProtKB:Q64347}; Multi-pass membrane protein. Cell membrane, sarcolemma, T-tubule {ECO:0000250|UniProtKB:Q64347}; Multi-pass membrane protein

Tissue Location

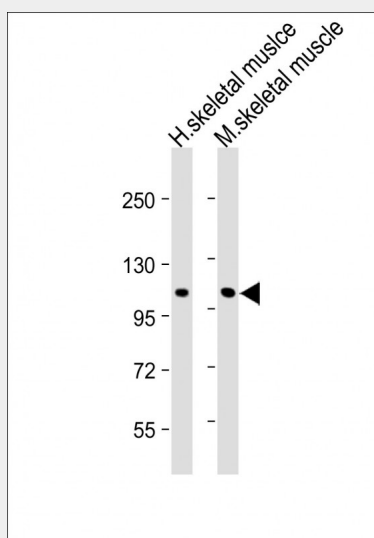
Predominantly expressed in skeletal muscles.

CLCN1 Antibody (N-Term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

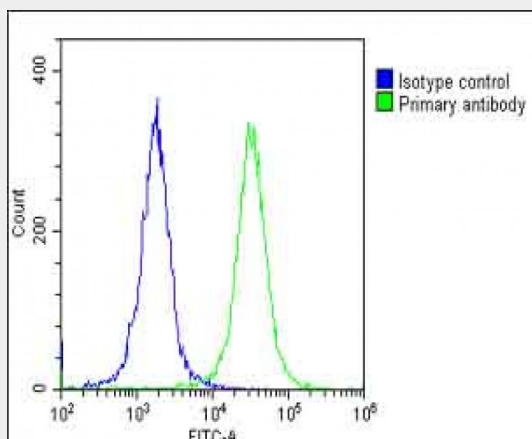
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CLCN1 Antibody (N-Term) - Images



All lanes : Anti-CLCN1 Antibody (N-Term) at 1:2000 dilution Lane 1: Human skeletal muscle lysate
Lane 2: Mouse skeletal muscle lysate Lysates/proteins at 20 µg per lane. Secondary Goat

Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 109 kDa
Blocking/Dilution buffer: 5% NFDM/TBST.



Overlay histogram showing Hela cells stained with AP22311a(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22311a, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(1583138) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10⁶ cells) used under the same conditions. Acquisition of >10, 000 events was performed.

CLCN1 Antibody (N-Term) - Background

Voltage-gated chloride channel. Chloride channels have several functions including the regulation of cell volume; membrane potential stabilization, signal transduction and transepithelial transport.

CLCN1 Antibody (N-Term) - References

- Steinmeyer K.,et al.EMBO J. 13:737-743(1994).
- Scherer S.W.,et al.Science 300:767-772(2003).
- Koch M.C.,et al.Science 257:797-800(1992).
- George A.L. Jr.,et al.Nat. Genet. 3:305-310(1993).
- Lorenz C.,et al.Hum. Mol. Genet. 3:941-946(1994).