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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, ClC-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

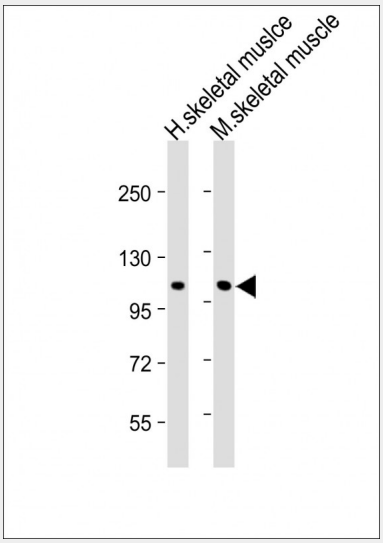
Tissue Location
Predominantly expressed in skeletal muscles.

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 Cytomety
- Cell Culture

CLCN1 Antibody (N-Term) - Images



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

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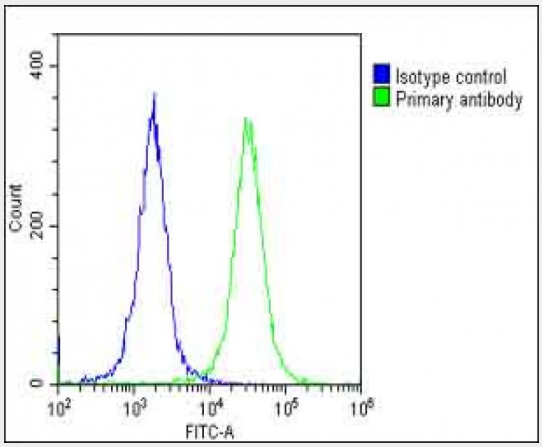
Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 109 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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 icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22311a, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(1583138) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 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

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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).