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# Anti-CLCN1 Antibody

Rabbit polyclonal antibody to CLCN1 Catalog # AP59921

#### **Product Information**

Application WB
Primary Accession P35523
Other Accession O64347

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 108626

#### **Additional Information**

**Gene ID** 1180

Other Names CLC1; Chloride channel protein 1; ClC-1; Chloride channel protein, skeletal

muscle

**Target/Specificity** KLH-conjugated synthetic peptide encompassing a sequence within the

N-term region of human CLCN1. The exact sequence is proprietary.

**Dilution** WB~~WB (1/500 - 1/1000)

**Format** Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

**Storage** Store at -20 °C.Stable for 12 months from date of receipt

#### **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: <u>16027167</u>, PubMed: <u>22521272</u>, PubMed: <u>22641783</u>,

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: <u>10051520</u>, PubMed: <u>10962018</u>, PubMed: <u>29809153</u>,

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};

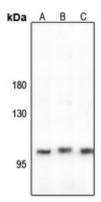
Multi-pass membrane protein

**Tissue Location** Predominantly expressed in skeletal muscles.

## **Background**

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human CLCN1. The exact sequence is proprietary.

### **Images**



Western blot analysis of CLCN1 expression in Hela (A), MG63 (B), mouse muscle (C) whole cell lysates.

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