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Anti-CLCN1 Antibody

Catalog # AP59921

Product Information

Application	WB, IHC
Primary Accession	P35523
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	108626

Additional Information

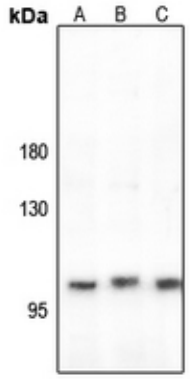
Gene ID	1180
Other Names	CLC1; Chloride channel protein 1; ClC-1; Chloride channel protein, skeletal muscle
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human CLCN1. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

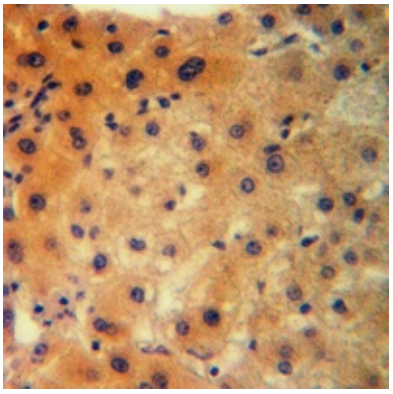
Name	CLCN1 {ECO:0000303|PubMed:8533761, ECO:0000312|HGNC:HGNC:2019}
Function	Voltage-gated chloride channel involved in skeletal muscle excitability. Generates most of the plasma membrane chloride conductance in skeletal muscle fibers, stabilizes the resting membrane potential and contributes to the repolarization phase during action potential firing (PubMed:12456816, PubMed: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.

Images



Western blot analysis of CLCN1 expression in Hela (A), MG63 (B), mouse muscle (C) whole cell lysates. (Predicted band size: 108 kD; Observed band size: 108 kD)



Immunohistochemical analysis of CLCN1 staining in human liver cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.