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CLCNKA Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17427a

Specification

CLCNKA Antibody (N-term) - Product Information

Application	**WB,E**
Primary Accession	P51800
Other Accession	NP_001036169.1, NP_004061.3
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**75285**
Antigen Region	**20-47**

CLCNKA Antibody (N-term) - Additional Information

Gene ID 1187

Other Names
Chloride channel protein ClC-Ka, Chloride channel Ka, ClC-K1, CLCNKA

Target/Specificity
This CLCNKA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 20-47 amino acids from the N-terminal region of human CLCNKA.

Dilution
WB~~1:1000
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
CLCNKA Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CLCNKA Antibody (N-term) - Protein Information

Name CLCNKA {ECO:0000303|PubMed:18310267, ECO:0000312|HGNC:HGNC:2026}

Function Anion-selective channel permeable to small monovalent anions with ion selectivity for

chloride > bromide > nitrate > iodide (PubMed:11734858, PubMed:12111250). Forms a homodimeric channel where each subunit has its own ion conduction pathway. May conduct double- barreled currents controlled by two types of gates, two fast gates that control each subunit independently and a slow common gate that opens and shuts off both subunits simultaneously (PubMed:11734858, PubMed:12111250, PubMed:18310267, PubMed:18776122, PubMed:19646679, PubMed:20538786). Assembles with the regulatory subunit BSND/Barttin for sorting at the basolateral plasma membrane domain and functional switch to the ion conducting state. CLCNKA:BSND channels display mostly a linear current-voltage relationship with fast gating at negative potentials (PubMed:11734858, PubMed:12111250, PubMed:18310267, PubMed:18776122, PubMed:20538786). Mediates transepithelial chloride transport from the lumen to interstitial compartment along the thin ascending limb of Henle's loop, contributing to generation of hypertonic medullary interstitium as a countercurrent system to achieve urine concentration (By similarity) (PubMed:15044642). Conducts chloride currents in the stria vascularis of the inner ear to establish the endocochlear potential necessary for normal hearing (PubMed:15044642, PubMed:18310267, PubMed:19646679).

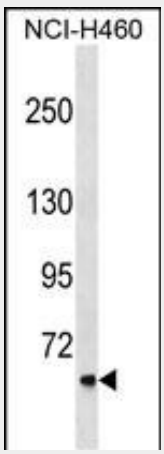
Cellular Location
Basolateral cell membrane {ECO:0000250|UniProtKB:Q9WUB7}; Multi-pass membrane protein

CLCNKA 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

CLCNKA Antibody (N-term) - Images



CLCNKA Antibody (N-term) (Cat. #AP17427a) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the CLCNKA antibody detected the CLCNKA protein (arrow).

CLCNKA Antibody (N-term) - Background

This gene is a member of the CLC family of voltage-gated

chloride channels. The encoded protein is predicted to have 12 transmembrane domains, and requires a beta subunit called barttin to form a functional channel. It is thought to function in salt reabsorption in the kidney and potassium recycling in the inner ear. The gene is highly similar to CLCNKB, which is located 10 kb downstream from this gene. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq].

CLCNKA Antibody (N-term) - References

Bailey, S.D., et al. Diabetes Care (2010) In press :
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)
Kramer, B.K., et al. Nat Clin Pract Nephrol 4(1):38-46(2008)
Martinez, G.Q., et al. PLoS ONE 3 (7), E2746 (2008) :
Sile, S., et al. Hum. Hered. 65(1):33-46(2008)