

## **CLCNKB Antibody (N-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14969A

### **Specification**

## **CLCNKB Antibody (N-term) - Product Information**

Application WB,E
Primary Accession P51801

Other Accession Q9WUB7, NP\_000076.2

Reactivity
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region

Mouse
Rabbit
Polyclonal
Rabbit IgG
75446
11-40

### **CLCNKB Antibody (N-term) - Additional Information**

#### **Gene ID 1188**

#### **Other Names**

Chloride channel protein CIC-Kb, Chloride channel Kb, CIC-K2, CLCNKB

#### Target/Specificity

This CLCNKB antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 11-40 amino acids from the N-terminal region of human CLCNKB.

# **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**

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

### **CLCNKB Antibody (N-term) - Protein Information**

Name CLCNKB {ECO:0000303|PubMed:18310267, ECO:0000312|HGNC:HGNC:2027}

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:16849430, PubMed:18776122, PubMed:19646679). Assembles with the regulatory subunit BSND/Barttin for sorting at the basolateral plasma membrane domain and functional switch to the ion conducting state. CLCNKB:BSND channels display mostly a linear current- voltage relationship controlled by common gate (PubMed:11734858, PubMed:12111250, PubMed:16849430, PubMed:18776122, PubMed:19646679). Mediates chloride conductance along nephron segments, namely the thick ascending limb of Henle's loop, convoluted tubule and the collecting duct, contributing to the maintenance of systemic acid-base and electrolyte homeostasis (By similarity). 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**

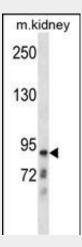
Basolateral cell membrane; Multi-pass membrane protein

### **CLCNKB Antibody (N-term) - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### **CLCNKB Antibody (N-term) - Images**



CLCNKB Antibody (N-term) (Cat. #AP14969a) western blot analysis in mouse kidney tissue lysates (35ug/lane). This demonstrates the CLCNKB antibody detected the CLCNKB protein (arrow).

#### **CLCNKB Antibody (N-term) - Background**

The protein encoded by this gene is a member of the family of voltage-gated chloride channels. Chloride channels have several





functions, including the regulation of cell volume, membrane potential stabilization, signal transduction and transepithelial transport. This gene is expressed predominantly in the kidney and may be important for renal salt reabsorption. Mutations in this gene are associated with autosomal recessive Bartter syndrome type 3 (BS3). Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq].

# **CLCNKB Antibody (N-term) - References**

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Yu, Y., et al. Clin. Genet. 77(2):155-162(2010) Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009) Brochard, K., et al. Nephrol. Dial. Transplant. 24(5):1455-1464(2009) Sile, S., et al. J. Hypertens. 27(2):298-304(2009)