

CLCN7 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11863B

Specification

CLCN7 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB, IF, IHC-P,E <u>P51798</u> <u>P51799, O70496, Q4PKH3, NP_001278.1</u> Human Bovine, Mouse, Rat Rabbit Polyclonal Rabbit IgG 88679 692-720

CLCN7 Antibody (C-term) - Additional Information

Gene ID 1186

Other Names H(+)/Cl(-) exchange transporter 7, Chloride channel 7 alpha subunit, Chloride channel protein 7, ClC-7, CLCN7

Target/Specificity

This CLCN7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 692-720 amino acids from the C-terminal region of human CLCN7.

Dilution WB~~1:1000 IF~~1:10~50 IHC-P~~1:10~50 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

CLCN7 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CLCN7 Antibody (C-term) - Protein Information



Name CLCN7 (HGNC:2025)

Function Slowly voltage-gated channel mediating the exchange of chloride ions against protons (PubMed:<u>18449189</u>, PubMed:<u>21527911</u>). Functions as antiporter and contributes to the acidification of the lysosome lumen and may be involved in maintaining lysosomal pH (PubMed:<u>18449189</u>, PubMed:<u>21527911</u>, PubMed:<u>31155284</u>). The CLC channel family contains both chloride channels and proton-coupled anion transporters that exchange chloride or another anion for protons (By similarity). The presence of conserved gating glutamate residues is typical for family members that function as antiporters (By similarity).

Cellular Location Lysosome membrane; Multi-pass membrane protein

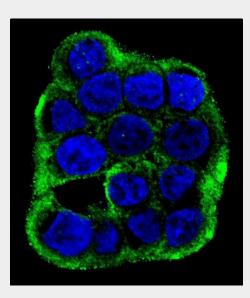
Tissue Location Brain and kidney..

CLCN7 Antibody (C-term) - Protocols

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

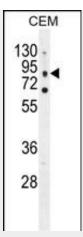
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- <u>Dot Blot</u>
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CLCN7 Antibody (C-term) - Images

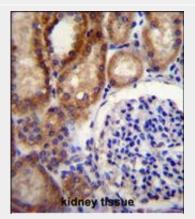


Confocal immunofluorescent analysis of CLCN7 Antibody (C-term)(Cat#AP11863b) with WiDr cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).





CLCN7 Antibody (C-term) (Cat. #AP11863b) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the CLCN7 antibody detected the CLCN7 protein (arrow).



CLCN7 Antibody (C-term) (Cat. #AP11863b)immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of CLCN7 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

CLCN7 Antibody (C-term) - Background

The product of this gene belongs to the CLC chloride channel family of proteins. Chloride channels play important roles in the plasma membrane and in intracellular organelles. This gene encodes chloride channel 7. Defects in this gene are the cause of osteopetrosis autosomal recessive type 4 (OPTB4), also called infantile malignant osteopetrosis type 2 as well as the cause of autosomal dominant osteopetrosis type 2 (OPTA2), also called autosomal dominant Albers-Schonberg disease or marble disease autosoml dominant. Osteopetrosis is a rare genetic disease characterized by abnormally dense bone, due to defective resorption of immature bone. OPTA2 is the most common form of osteopetrosis, occurring in adolescence or adulthood.

CLCN7 Antibody (C-term) - References

Furthner, D., et al. Klin Padiatr 222(3):180-183(2010) Phadke, S.R., et al. Indian J. Med. Res. 131, 508-514 (2010) : Pangrazio, A., et al. Hum. Mutat. 31 (1), E1071-E1080 (2010) : Kajiya, H., et al. Pflugers Arch. 458(6):1049-1059(2009)



Mazzolari, E., et al. Am. J. Hematol. 84(8):473-479(2009) CLCN7 Antibody (C-term) - Citations

Surface vacuolar ATPase in ameloblastoma contributes to tumor invasion of the jaw bone.