

CLCN7 Antibody (C-term) Blocking peptide

Synthetic peptide Catalog # BP11863b

Specification

CLCN7 Antibody (C-term) Blocking peptide - Product Information

Primary Accession P51798

Other Accession <u>NP_001278.1</u>, <u>NP_001107803.1</u>

CLCN7 Antibody (C-term) Blocking peptide - Additional Information

Gene ID 1186

Other Names

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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CLCN7 Antibody (C-term) Blocking peptide - Protein Information

Name CLCN7 (HGNC:2025)

Function

Slowly voltage-gated channel mediating the exchange of chloride ions against protons (PubMed:18449189, PubMed:21527911/a>). Functions as antiporter and contributes to the acidification of the lysosome lumen and may be involved in maintaining lysosomal pH (PubMed:18449189, PubMed:21527911, PubMed:31155284). 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) Blocking peptide - Protocols

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

• Blocking Peptides

CLCN7 Antibody (C-term) Blocking peptide - Images

CLCN7 Antibody (C-term) Blocking peptide - Background

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

CLCN7 Antibody (C-term) Blocking peptide - 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)