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CLCN3 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP17154c

Specification

CLCN3 Antibody (Center) Blocking Peptide - Product Information

Primary Accession P51790

CLCN3 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 1182

Other Names
H(+)/Cl(-) exchange transporter 3, Chloride channel protein 3, ClC-3, Chloride transporter ClC-3, CLCN3

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.

CLCN3 Antibody (Center) Blocking Peptide - Protein Information

Name CLCN3

Function
[Isoform 1]: Strongly outwardly rectifying, electrogenic H(+)/Cl(-)exchanger which mediates the exchange of chloride ions against protons (By similarity). The CLC channel family contains both chloride channels and proton-coupled anion transporters that exchange chloride or another anion for protons (PubMed:29845874). The presence of conserved gating glutamate residues is typical for family members that function as antiporters (PubMed:29845874).

Cellular Location
[Isoform 1]: Early endosome membrane; Multi-pass membrane protein. Late endosome membrane; Multi-pass membrane protein. Lysosome membrane {ECO:0000250|UniProtKB:P51791}; Multi-pass membrane protein. Cell membrane {ECO:0000250|UniProtKB:P51792}; Multi-pass membrane protein. Note=Isoform 1 is localized mainly in late endosomes.

Tissue Location
Expressed primarily in tissues derived from neuroectoderm. Within the brain, its expression is

particularly evident in the hippocampus, olfactory cortex, and olfactory bulb. Highly expressed in aortic and coronary vascular smooth muscle cells, and aortic endothelial cells. Also expressed in tracheal and alveolar epithelial cells, and intima and media of the pulmonary vessels Expressed in bronchus and colon (at protein level)

CLCN3 Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

CLCN3 Antibody (Center) Blocking Peptide - Images

CLCN3 Antibody (Center) Blocking Peptide - Background

CLCN3 mediates the exchange of chloride ions against protons. Functions as antiporter and contributes to the acidification of the endosome and synaptic vesicle lumen, and may thereby affect vesicle trafficking and exocytosis. May play an important role in neuronal cell function through regulation of membrane excitability by protein kinase C. It could help neuronal cells to establish short-term memory.

CLCN3 Antibody (Center) Blocking Peptide - References

Cuddapah, V.A., et al. J. Biol. Chem. 285(15):11188-11196(2010)Xiong, D., et al. Clin. Exp. Pharmacol. Physiol. 36(4):386-393(2009)Yin, Z., et al. Am. J. Physiol., Cell Physiol. 294 (2), C535-C542 (2008) :Matsuda, J.J., et al. Am. J. Physiol., Cell Physiol. 294 (1), C251-C262 (2008) :Kasinathan, R.S., et al. FEBS Lett. 581(28):5407-5412(2007)