

CLCN3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17154c

Specification

CLCN3 Antibody (Center) - Product Information

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB,E <u>P51790</u> <u>P51792, 018894, P51791, NP_776297.2, NP_001820.2</u> Human Mouse, Rabbit, Rat Rabbit Polyclonal Rabbit IgG 90966 285-313

CLCN3 Antibody (Center) - Additional Information

Gene ID 1182

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

Target/Specificity

This CLCN3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 285-313 amino acids from the Central region of human CLCN3.

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

CLCN3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

CLCN3 Antibody (Center) - 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:<u>29845874</u>). The presence of conserved gating glutamate residues is typical for family members that function as antiporters (PubMed:<u>29845874</u>).

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

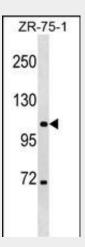
Expressed primarily in tissues derived from neuroectoderm. Within the brain, its expression is particularly evident in the hippocampus, olfactory cortex, and olfactory bulb. Highly expressed in aortic and coronary vascular smooth muscle cells, and aortic endothelial cells. Also expressed in tracheal and alveolar epithelial cells, and intima and media of the pulmonary vessels Expressed in bronchus and colon (at protein level)

CLCN3 Antibody (Center) - Protocols

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

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

CLCN3 Antibody (Center) - Images



CLCN3 Antibody (Center) (Cat. #AP17154c) western blot analysis in ZR-75-1 cell line lysates (35ug/lane). This demonstrates the CLCN3 antibody detected the CLCN3 protein (arrow).



CLCN3 Antibody (Center) - 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) - 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)