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CLCN3 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58563

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	P51790
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	90966
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CLCN3/CLC-3
Epitope Specificity	81-180/818
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Isoform 1: Membrane; Multi-pass membrane protein. Early endosome membrane; Multi-pass membrane protein. Late endosome membrane; Multi-pass membrane protein. Cytoplasmic vesicle, secretory vesicle membrane; Multi-pass membrane protein. Isoform 2: Membrane; Multi-pass membrane protein. Early endosome membrane; Multi-pass membrane protein. Late endosome membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein.
SIMILARITY	Belongs to the chloride channel (TC 2.A.49) family. ClC-3/CLCN3 subfamily.Contains 2 CBS domains.
SUBUNIT	Homo- or heterodimer. Isoform 2 interacts with GOPC, PDZK1 and SLC9A3R1/EBP50.
Post-translational modifications	N-glycosylated.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

Additional Information

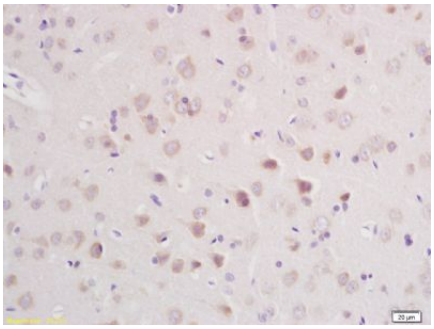
Gene ID	1182
Other Names	H(+)/Cl(-) exchange transporter 3, Chloride channel protein 3, ClC-3, Chloride transporter ClC-3, CLCN3

Target/Specificity	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).
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:50-200,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

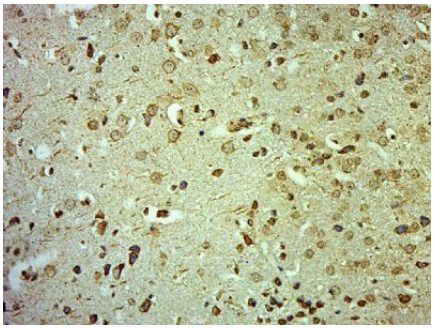
Name	CLCN3
Function	[Isoform 1]: Strongly outwardly rectifying, electrogenic H(+)/Cl(-)exchanger which mediates the exchange of chloride ions against protons (By similarity). The CLC channel family contains both chloride channels and proton-coupled anion transporters that exchange chloride or another 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)

Images



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-CLCN3/CLC-3 Polyclonal Antibody, Unconjugated(AP58563) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

Paraformaldehyde-fixed, paraffin embedded (Mouse



brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CLCN3) Polyclonal Antibody, Unconjugated (AP58563) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.