



CLCN3 mouse mAb

Catalog No	YP-mAb-11975
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	CLCN3
Immunogen	Synthesized peptide derived from human CLCN3 AA range: 597-647
Specificity	This antibody detects endogenous levels of CLCN3 at Human/Mouse/Rat
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CIC 3;CLC3;CLCN3
Observed Band	
Calculated Molecular Weight	
Cell Pathway	[Isoform 1]: Early endosome membrane ; Multi-pass membrane protein . Late endosome membrane ; Multi-pass membrane protein . Lysosome membrane ; Multi-pass membrane protein . Cell membrane ; Multi-pass membrane protein . Isoform 1 is localized mainly in late endosomes. .; [Isoform 2]: Golgi apparatus membrane ; Multi-pass membrane protein . Cell projection, ruffle membrane ; Multi-pass membrane protein . Isoform 2 is mainly enriched in the Golgi (PubMed:12471024). Colocalizes with SLC9A3R1/EBP50 in membrane ruffles (PubMed:11967229). .
Tissue 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).

**Function**

domain:Isoform 2 contains a C-terminal PDZ-binding motif mediating the interaction with GOPC.,function: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.,miscellaneous:The CLC channel family contains both chloride channels and proton-coupled anion transporters that exchange chloride or another anion for protons. The presence of conserved gating glutamate residues is typical for family members that function as antiporters.,PTM:N-glycosylated.,similarity:Belongs to the chloride channel (TC 2.A.49) family.,similarity:Contains 2 CBS domains.,subcellu

Background

This gene encodes a member of the voltage-gated chloride channel (ClC) family. The encoded protein is present in all cell types and localized in plasma membranes and in intracellular vesicles. It is a multi-pass membrane protein which contains a ClC domain and two additional C-terminal CBS (cystathionine beta-synthase) domains. The ClC domain catalyzes the selective flow of Cl⁻ ions across cell membranes, and the CBS domain may have a regulatory function. This protein plays a role in both acidification and transmitter loading of GABAergic synaptic vesicles, and in smooth muscle cell activation and neointima formation. This protein is required for lysophosphatidic acid (LPA)-activated Cl⁻ current activity and fibroblast-to-myofibroblast differentiation. The protein activity is regulated by Ca(2+)/calmodulin-dependent protein kinase II (CaMKII) in glioma cells. Multiple alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Aug 2011],

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



Products Images

Western Blot analysis of various cells using CLCN3 mouse mAb