

CLCN2 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP6329a**Specification**

CLCN2 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [P51788](#)**CLCN2 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 1181**Other Names**

Chloride channel protein 2, CIC-2, CLCN2

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP6329a](/product/products/AP6329a) was selected from the C-term region of human CLCN2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

CLCN2 Antibody (C-term) Blocking Peptide - Protein Information**Name** CLCN2**Function**

Voltage-gated chloride channel. Chloride channels have several functions including the regulation of cell volume, membrane potential stabilization, signal transduction and transepithelial transport. Involved in the regulation of aldosterone production. The opening of CLCN2 channels at hyperpolarized membrane potentials in the glomerulosa causes cell membrane depolarization, activation of voltage-gated Ca²⁺ channels and increased expression of aldosterone synthase, the rate-limiting enzyme for aldosterone biosynthesis (PubMed:[29403011](http://www.uniprot.org/citations/29403011), PubMed:[29403012](http://www.uniprot.org/citations/29403012)).

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

Ubiquitously expressed. Moderately expressed in aortic and coronary vascular smooth muscle cells and expressed at a low level in aortic endothelial cells. Expressed in the adrenal gland, predominantly in the zona glomerulosa (PubMed:29403011)

CLCN2 Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

CLCN2 Antibody (C-term) Blocking Peptide - Images**CLCN2 Antibody (C-term) Blocking Peptide - Background**

CLCN2 is a voltage-gated chloride channel, a class of proteins that have several functions including the regulation of cell volume, membrane potential stabilization, signal transduction and transepithelial transport. This protein is ubiquitously expressed, with moderate expression in aortic and coronary vascular smooth muscle cells and low levels expressed in aortic endothelial cells. Defects in CLCN2 may be the cause of epilepsy with grand mal seizures on awakening, childhood absence epilepsy type 3, and juvenile absence epilepsy. Single nucleotide polymorphisms (SNPs) of CLCN2 may also act as potential modifiers of cystic fibrosis disease severity.

CLCN2 Antibody (C-term) Blocking Peptide - References

Hum. Molec. Genet. 4: 407-413, 1995. Nature Genet. 33: 527-532, 2003. Hum. Molec. Genet. 9: 1465-1472, 2000. Proc. Nat. Acad. Sci. 95: 3879-3884, 1998. Neuroscience. 101: 51-65, 2000. Biochem. Biophys. Res. Commun. 95, 265-271 (2005)