

**Goat Anti-CLIC4 Antibody**  
Peptide-affinity purified goat antibody  
Catalog # AF1249a

### Specification

---

#### Goat Anti-CLIC4 Antibody - Product Information

Application	ICC, WB
Primary Accession	<a href="#">O9Y696</a>
Other Accession	<a href="#">NP_039234</a> , <a href="#">25932</a> , <a href="#">29876 (mouse)</a> , <a href="#">83718 (rat)</a>
Reactivity	Human, Mouse
Predicted	Rat, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	28772

#### Goat Anti-CLIC4 Antibody - Additional Information

**Gene ID** 25932

#### Other Names

Chloride intracellular channel protein 4, Intracellular chloride ion channel protein p64H1, CLIC4

#### Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

Goat Anti-CLIC4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### Goat Anti-CLIC4 Antibody - Protein Information

**Name** CLIC4 {ECO:0000303|PubMed:12163372, ECO:0000312|HGNC:HGNC:13518}

#### Function

In the soluble state, catalyzes glutaredoxin-like thiol disulfide exchange reactions with reduced glutathione as electron donor (PubMed:<a href="http://www.uniprot.org/citations/25581026" target="\_blank">25581026</a>, PubMed:<a href="http://www.uniprot.org/citations/37759794" target="\_blank">37759794</a>). Can insert into membranes and form voltage-dependent multi-ion conductive channels. Membrane insertion seems to be redox-regulated and may occur only under oxidizing conditions (By similarity) (PubMed:<a

[16176272](http://www.uniprot.org/citations/16176272)). Has alternate cellular functions like a potential role in angiogenesis or in maintaining apical-basolateral membrane polarity during mitosis and cytokinesis. Could also promote endothelial cell proliferation and regulate endothelial morphogenesis (tubulogenesis). Promotes cell-surface expression of HRH3.

#### Cellular Location

Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasmic vesicle membrane; Single-pass membrane protein. Nucleus. Cell membrane; Single-pass membrane protein. Mitochondrion {ECO:0000250|UniProtKB:Q9Z0W7}. Cell junction. Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q9Z0W7}; Single-pass membrane protein {ECO:0000250|UniProtKB:Q9Z0W7}. Note=Colocalized with AKAP9 at the centrosome and midbody. Exists both as soluble cytoplasmic protein and as membrane protein with probably a single transmembrane domain Present in an intracellular vesicular compartment that likely represent trans-Golgi network vesicles. Might not be present in the nucleus of cardiac cells. {ECO:0000250|UniProtKB:Q9Z0W7, ECO:0000269|PubMed:14569596}

#### Tissue Location

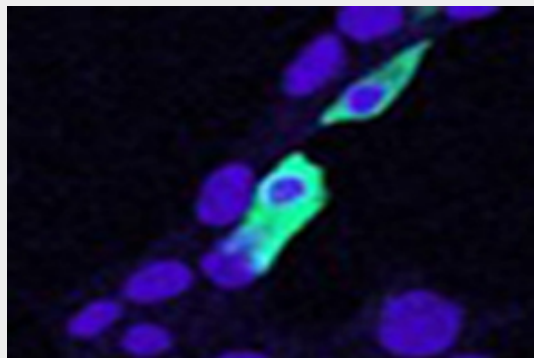
Detected in epithelial cells from colon, esophagus and kidney (at protein level). Expression is prominent in heart, kidney, placenta and skeletal muscle.

#### Goat Anti-CLIC4 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Goat Anti-CLIC4 Antibody - Images



AF1249a (5ug/ml) staining of min6 cells transiently expressing mouse Clic4. Nuclear counterstain by Hoechst. Data kindly provided by Dr. Virginie Nepote, Lausanne University, Switzerland.



AF1249a (0.1  $\mu\text{g/ml}$ ) staining of human kidney lysate (35  $\mu\text{g}$  protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

### **Goat Anti-CLIC4 Antibody - Background**

Chloride channels are a diverse group of proteins that regulate fundamental cellular processes including stabilization of cell membrane potential, transepithelial transport, maintenance of intracellular pH, and regulation of cell volume. Chloride intracellular channel 4 (CLIC4) protein, encoded by the CLIC4 gene, is a member of the p64 family; the gene is expressed in many tissues and exhibits a intracellular vesicular pattern in Panc-1 cells (pancreatic cancer cells).

### **Goat Anti-CLIC4 Antibody - References**

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. *Mol Med*, 2010 Jul-Aug. PMID 20379614.  
Mutation detection in candidate genes for benign familial infantile seizures on a novel locus. Li N, et al. *Int J Neurosci*, 2010 Mar. PMID 20374090.  
Spatiotemporal regulation of chloride intracellular channel protein CLIC4 by RhoA. Ponsioen B, et al. *Mol Biol Cell*, 2009 Nov. PMID 19776349.  
S100A4 and bone morphogenetic protein-2 codependently induce vascular smooth muscle cell migration via phospho-extracellular signal-regulated kinase and chloride intracellular channel 4. Spiekerkoetter E, et al. *Circ Res*, 2009 Sep 25. PMID 19713532.  
CLIC4 mediates TGF-beta1-induced fibroblast-to-myofibroblast transdifferentiation in ovarian cancer. Yao Q, et al. *Oncol Rep*, 2009 Sep. PMID 19639201.