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Goat Anti-CLIC4 Antibody

Peptide-affinity purified goat antibody
Catalog # AF1249a

Specification

Goat Anti-CLIC4 Antibody - Product Information

Application	**ICC, WB**
Primary Accession	Q9Y696
Other Accession	NP_039234, 25932, 29876 (mouse), 83718 (rat)
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

Function
Can insert into membranes and form poorly selective ion channels that may also transport chloride ions. Channel activity depends on the pH. Membrane insertion seems to be redox-regulated and may occur only under oxydizing conditions. Promotes cell-surface expression of HRH3. 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).

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. 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}

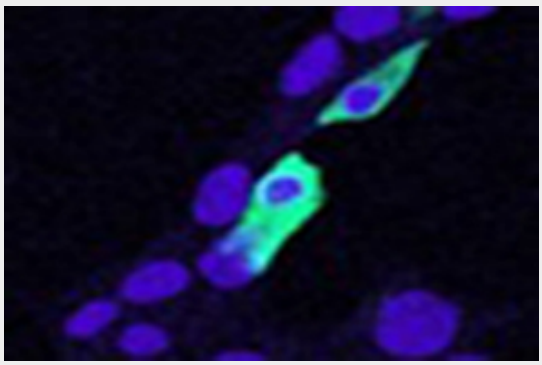
Tissue Location
Detected in epithelial cells from colon, esophagus and kidney (at protein level). Expression is prominent in heart, kidney, placenta and skeletal muscle.

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 Cytomety
- Cell Culture

Goat Anti-CLIC4 Antibody - Images



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

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AF1249a (0.1 µg/ml) staining of human kidney lysate (35 µg 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.