

#53424 Store at -20°C

CLIC1 (D7D6H) Rabbit mAb**Cell Signaling**
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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP	H M R	Endogenous	22	Rabbit IgG	#O00299	1192

Product Usage Information**Application**Western Blotting
Immunoprecipitation**Dilution**1:1000
1:50**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity / Sensitivity

CLIC1 (D7D6H) Rabbit mAb recognizes endogenous levels of total CLIC1 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Glu234 of human CLIC1 protein.

Background

Chloride intracellular channel (CLIC) proteins belong to a family of highly conserved transport proteins found as both soluble and membrane-bound forms (1). Although CLIC proteins have putative, selective chloride ion channel activity, they are structural homologs to members of the glutathione-S-transferase protein superfamily and are likewise regulated by redox status (2). CLIC proteins are distinct from other ion channels in that they are found as both soluble and integral membrane forms, and their form determines their function (3-6). Chloride intracellular channel proteins are ubiquitously expressed in numerous tissue types and are involved in diverse biological functions (1,2).

CLIC1 is a member of the CLIC protein family. It is ubiquitously expressed in many tissues and organs (7). CLIC1 is overexpressed in multiple tumor types and has been implicated in the proliferation, migration, and invasion of these tumors (8-11). In the central nervous system, CLIC1 protein expression is elevated upon amyloid β-peptide treatment in neonatal rat microglia. Inhibition of CLIC1 prevents neuronal apoptosis in neurons co-cultured with amyloid β-peptide treated microglia (12). Further studies indicate that CLIC1 translocates from the cytosol to the plasma membrane of microglia upon exposure to amyloid β-peptide, and contributes to the subsequent neurotoxicity through generation of superoxide anions (13). These discoveries implicate CLIC1 as a possible therapeutic target for Alzheimer's disease.

Background References

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12. Novarino, G. et al. (2004) *J Neurosci* 24, 5322-30.
13. Milton, R.H. et al. (2008) *J Neurosci* 28, 11488-99.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key**WB:** Western Blotting **IP:** Immunoprecipitation**Cross-Reactivity Key**

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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