#1

CLCN3 (D8Y5Q) Rabbit mAb



Orders:	877-616-CELL (2355) orders@cellsignal.com
Support:	877-678-TECH (8324)
Web:	info@cellsignal.com cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IP, IF-F	Reactivity: H M R	Sensitivity: Endogenous	MW (kDa): 130-150	Source/Isotype: Rabbit IgG	UniProt ID: #P51790	Entrez-Gene Id: 1182		
Product Usage Application Information Western Blotting Immunoprecipitation Immunofluorescence (Frozen)		(Frozen)	Dilution 1:1000 1:50 1:100					
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/Sens	ity/Sensitivity CLCN3 (D8Y5Q) Rabbit mAb recognizes endogenous levels of total CLCN3 protein.							
Source / Purification		Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human CLCN3 protein.						
Background		Chloride channel 3 (CLCN3) is a voltage-gated chloride channel (CIC) family protein that mediates H ⁺ /Cl ⁻ exchange across cell membranes. This 818 amino acid, multi-pass membrane protein is highly expressed in the brain and is especially abundant in the olfactory bulb, hippocampus, and cerebellum (1). CLCN3 protein localizes to endosomal compartments and synaptic vesicles where it contributes to vesicle acidification and proper synaptic vesicle neurotransmitter loading for GABAergic synaptic transmission (2,3). CAMKII-mediated phosphorylation of CLCN3 regulates chloride channel activity by regulating cell surface targeting of the CLCN3 chloride channel (4). Research studies show abnormally high CLCN3 expression at the cell surface of human glioma cells, and that CAMKII-dependent regulation of these channels contributes to glioma invasion (5).						
Background Re	ferences	1. Kawasaki, M. et al. (1994) <i>Neuron</i> 12, 597-604. 2. Stobrawa, S.M. et al. (2001) <i>Neuron</i> 29, 185-96. 3. Riazanski, V. et al. (2011) <i>Nat Neurosci</i> 14, 487-94. 4. Huang, P. et al. (2001) <i>J Biol Chem</i> 276, 20093-100. 5. Cuddapah, V.A. and Sontheimer, H. (2010) <i>J Biol Chem</i> 285, 11188-96.						
Species Reactiv	ity	Species reactivity is de	termined by testing	g in at least one approve	ed application (e.g., v	western blot).		
Western Blot Bu	ıffer	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.						
Applications Ke	у	W: Western Blotting IP: Immunoprecipitation IF-F: Immunofluorescence (Frozen)						
Cross-Reactivity	/ Key	H: Human M: Mouse R: Rat						
Trademarks and Patents Cell Signaling Technology is a trademark of Cell Signaling Technology			logy, Inc.					
		XP is a registered trade	emark of Cell Signa	ling Technology, Inc.				
		All other trademarks a more information.	re the property of t	heir respective owners.	Visit cellsignal.com/	trademarks for		
Limited Uses	Uses Except as otherwise expressly agreed in a writing signed by a legally authorized representat the following terms apply to Products provided by CST, its affiliates or its distributors. Any Conterms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and force or effect.					esentative of CST, Any Customer's n, unless ted and are of no		

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.