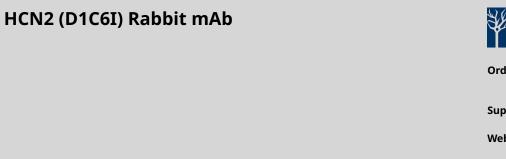
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Applications: W, IP	Reactivity: H M R	Sensitivity: Endogenous	MW (kDa): 120	Source/Isotype: Rabbit IgG	UniProt ID: #Q9UL51	Entrez-Gene Id: 610	
Product Usage Information	2	Application Western Blotting Immunoprecipitation			Dilution 1:1000 1:50		
Storage		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/Sen	pecificity/Sensitivity HCN2 (D1C6I) Rabbit mAb recognizes endogenous levels of total HCN2 protein.						
Source / Purifi	cation	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala751 of human HCN2 protein.					
Background		The voltage-activated ion channel superfamily includes both cyclic nucleotide-gated (CNG) channels and hyperpolarization-activated cyclic nucleotide-modulated (HCN) channels (1,2). The direct binding of the cyclic nucleotides cAMP and cGMP promotes the gating of these channels, from the closed to an open state. Research studies demonstrate that HCN channels are involved in repetitive firing, resting membrane potential, and dendritic integration in neurons (1,3). HCN proteins are found in homotetramers and heterotetramers composed of HCN1 and HCN2 subunits (4). Tetramerization of HCN proteins results from cAMP binding to the channel, which triggers the release of the tonic inhibition exerted by the cytoplasmic cyclic nucleotide binding domain on the channel pore (5). HCN channels expressed in dorsal root ganglia neurons may play a role in acute inflammatory pain (6). Cardiac HCN channels ensure electrical rhythmicity in cardiomyocytes (7).					
Background R	eferences	1. Craven, K.B. and Zag 2. Jan, L.Y. and Jan, Y.N 3. Nolan, M.F. et al. (20 4. Ulens, C. and Tytgat 5. Lolicato, M. et al. (20 6. Acosta, C. et al. (2009) 7. Biel, M. et al. (2009)	. (1990) <i>Nature</i> 34 103) <i>Cell</i> 115, 551-6 , J. (2001) <i>J Biol Che</i> 11) <i>J Biol Chem</i> 28 2) <i>PLoS One</i> 7, e50	4. em 276, 6069-72. 6, 44811-20. 442.	-401.		
Species Reacti	vity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).					
Western Blot E	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 K	ey	W: Western Blotting IP: Immunoprecipitation					
Cross-Reactivi	ty Key	H: Human M: Mouse R: Rat					
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