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phospho-KCNC1 (Ser503) Rabbit pAb

Catalog # AP96511

Product Information

Application	WB
Primary Accession	P25122
Other Accession	P25122
Reactivity	Rat, Human, Mouse
Predicted	Pig, Chicken, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	65857
Physical State	Liquid
Immunogen	KLH conjugated Synthesised phosphopeptide derived from rat KCNC1 around the phosphorylation site of Ser503
Epitope Specificity	AD(p-S)KL
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the potassium channel family. C (Shaw) (TC 1.A.1.2) subfamily. Kv3.1/KCNC1 sub-subfamily.
SUBUNIT	Heteromultimer with KCNG3, KCNG4 and KCNV2 (By similarity).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	KCNC1 mediates the voltage-dependent potassium ion permeability of excitable membranes. Assuming opened or closed conformations in response to the voltage difference across the membrane, the protein forms a potassium-selective channel through which potassium ions may pass in accordance with their electrochemical gradient. It forms a heteromultimer with KCNG3, KCNG4 and KCNV2.

Additional Information

Gene ID	25327
Other Names	EPM7; KV3.1; KV4; NGK2; C230009H10Rik; KShIIIB; Kcr2-1; Shaw; NGK2-KV4; KCNC1_HUMAN; KCNC1; Potassium voltage-gated channel subfamily C member 1; Voltage-gated potassium channel subunit Kv3.1; Voltage-gated potassium channel subunit Kv4; KCNC1_MOUSE; KCNC1_RAT; RAW2; potassium voltage-gated channel, Shaw-related subfamily, member 1; potassium channel, voltage gated Shaw related subfamily C, member 1; KCNC1 | Kv3.1 (phospho-S503); p-Kv3.1; phospho-Kv3.1; p-KCNC1; KCNC1 | Kv3.1 (phospho-Ser503)
Dilution	WB=1:500-2000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	Kcnc1 {ECO:0000312|RGD:2955}
Function	Voltage-gated potassium channel that opens in response to the voltage difference across the membrane and through which potassium ions pass in accordance with their electrochemical gradient (Probable) (PubMed:10482766, PubMed:1378392, PubMed:14679187). The mechanism is time-dependent and inactivation is slow (PubMed:10482766, PubMed:1378392). Plays an important role in the rapid repolarization of fast-firing brain neurons (PubMed:10482766). Can form functional homotetrameric channels and heterotetrameric channels that contain variable proportions of KCNC2, and possibly other family members as well (PubMed:10482766, PubMed:14679187). Contributes to fire sustained trains of very brief action potentials at high frequency in pallidal neurons (PubMed:10482766).
Cellular Location	Cell membrane; Multi-pass membrane protein. Cell projection, axon. Presynaptic cell membrane. Note=Localizes in parallel fiber membranes, distributed on the perisynaptic and extrasynaptic membranes away from the active zones.
Tissue Location	Expressed in brain (PubMed:1378392). Expressed in globus pallidal neurons of the basal ganglia (at protein level) (PubMed:10482766). Detected on Purkinje cells in the cerebellum molecular layer (at protein level) (PubMed:20857303)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.