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Product datasheet for TA328726

Cacna1e Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)SASQERSLDEGVSIDG, corresponding to amino acid residues 892-907 of rat CaV2.3.Â Intracellular loop between domains II and III.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN3.
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	calcium voltage-gated channel subunit alpha1 E
Database Link:	NP_062167 Entrez Gene 777 HumanEntrez Gene 12290 MouseEntrez Gene 54234 Rat

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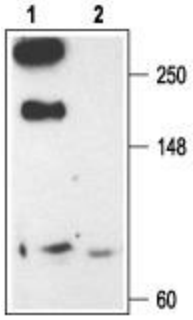
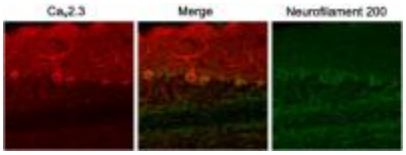
Background: Voltage-dependent Ca2+ channels (Cav channels) are pivotal players in many physiological roles such as secretion, contraction, migration and excitation.The voltage dependent Ca2+ channels are composed of several subunits; a1, Ã?, a2d and ?. Cav channels were originally divided into six physiological types: L, N , P, Q, R, and T type.The Cav2.3 (formerly named a1E) protein, forms the R type channels. R-type channels are highly sensitive to both SNX-482 (#RTS-500) and NiCl2. Cav2.3 channels were shown to mediate fast excitatory transmission in several synapses including the hippocampus.Cav2.3 channels can be modulated by the muscarinic G-protein coupled receptors. In HEK-293 cells, expressing Cav2.3 channels, the R-type channel was shown to be both facilitated and inhibited by m1 and m2 muscarinic receptors. However, inhibition was much weaker than facilitation for the m1 receptor, while for m2 receptors, inhibition was much more pronounced than activation.Facilitation and inhibition by the same receptors was probably exerted via different pathways as was indicated by their response to various inhibitors.

Synonyms: BII; CACH6; CACNL1A6; Cav2.3

Product images:



Western blot analysis of rat brain membranes: 1. Anti-CaV2.3 antibody, (1:200). 2. Anti-CaV2.3 antibody, preincubated with the control peptide antigen.



Expression of Cav2.3 in mouse cerebellum. Immunohistochemical staining of mouse cerebellum with Anti-Cav2.3 antibody. Cav2.3 (red) appears in both soma and dendritic trees of several Purkinje cells. Staining of neurofilament 200 (green) in the same brain section demonstrates the relationship between axons passing through the granule layer and the Purkinje cells.