

Product datasheet for TA329029

Scn1a 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 TEEQKKYYNAMKKLGSKK(C), corresponding to amino acid residues 1501-1518 of rat Nav1.1. ? ? ? ? ? Intracellular loop between domains III and IV.
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% NaN ₃ .
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:	sodium voltage-gated channel alpha subunit 1
Database Link:	NP_110502 Entrez Gene 6323 Human Entrez Gene 20265 Mouse Entrez Gene 81574 Rat P04774



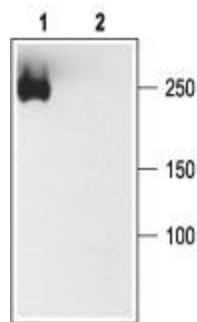
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Background:

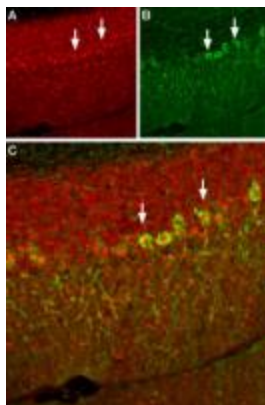
Voltage-gated sodium channels (Nav) are essential for the generation of action potentials and for cell excitability. Nav channels are activated in response to depolarization and selectively allow flow of Na⁺ ions. To date, nine Nav α subunits have been cloned and named Nav1.1-Nav1.9.4-5 The Nav channels are classified into two groups according to their sensitivity to Tetrodotoxin (TTX): TTX-sensitive (Nav1.1, Nav1.2, Nav1.3, Nav1.4, Nav1.6 and Nav1.7) and TTX-resistant (Nav1.5, Nav1.8 and Nav1.9). Mammalian sodium channels are heterotrimeric, composed of a central, pore-forming α subunit and two auxiliary β subunits. The expression of the α subunit isoform is developmentally regulated and tissue specific. Sodium channels in the adult central nervous system and heart contain β 1 through β 4 subunits, whereas sodium channels in adult skeletal muscle have only the β 1 subunit.

Synonyms:

FEB3; FEB3A; GEFSP2; HBSCI; NAC1; Nav1.1; SCN1; SMEI

Product images:

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



Expression of Nav channels in rat cerebellum. Immunohistochemical staining of rat cerebellum using Anti-Pan Nav antibody. A. Nav channels (red) appear in Purkinje cell bodies (vertical arrows) and in cells of the molecular layer (Mol), (horizontal arrows). B. Staining of Parvalbumin (green) in the same brain section. C. Confocal merge of Nav channels and Parvalbumin demonstrates the location of Nav channels to the cell body of Purkinje neurons.