

Product datasheet for **TA329030**

Scn3a Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, 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)HLEGNHRADGDRFP, corresponding to amino acid residues 511-524 rat Nav1.3. ?Å Intracellular, loop between domains I and II.
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:	sodium voltage-gated channel alpha subunit 3
Database Link:	NP_037251 Entrez Gene 6328 Human Entrez Gene 20269 Mouse Entrez Gene 497770 Rat P08104



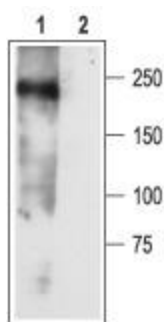
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Background:

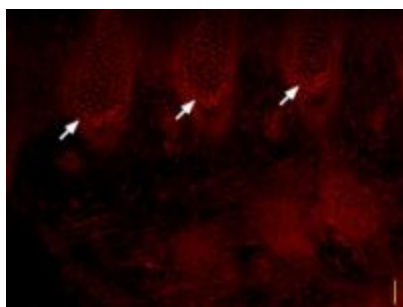
Voltage-gated sodium channels (Nav) are essential for the generation of action potentials and for cell excitability. Nav channels are activated in response to depolarization and selectively allow flow of Na⁺ ions. To date, nine Nav α subunits have been cloned and named Nav1.1-Nav1.9. The Nav channels 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 heterotrimers, 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. Nav1.3 is highly expressed in embryonic sensory neurons and CNS, but its level dramatically decreases in adult rodents. Up-regulation of Nav1.3 channel expression was described in injured neurons and injured spinal cord.

Synonyms:

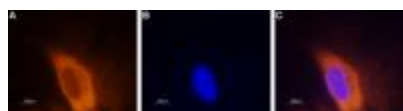
KIAA1356; NAC3; Nav1.3

Product images:


Western blot analysis of rat newborn brain membranes: 1. Anti-Nav1.3 antibody, (1:200). 2. Anti-Nav1.3 antibody, preincubated with the control peptide antigen.



Expression of Nav1.3 in rat embryo DRG. Immunohistochemical staining of rat embryo dorsal root ganglion (DRG) frozen sections using Anti-Nav1.3 antibody, (1:100). Nav1.3 is expressed in DRG embryonic cells (arrows). Calibration bar = 50 μ m.



Expression of Nav1.3 in rat DRG primary cells. Immunocytochemical staining of paraformaldehyde-fixed and permeabilized rat dorsal root ganglia (DRG) primary culture. A. DRG cells were stained using Anti-Nav1.3 antibody, (1:200) followed by goat anti-rabbit-AlexaFluor-555 secondary antibody. B. Nuclear staining of cells using the cell-permeable dye Hoechst 33342. C. Merged image of panels A and B.

