

Product datasheet for **TA329031**

Scn5a 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 DRLPKSDSEdGPRALNQLS(C), corresponding to amino acid residues 493-511 of α rat NaV1.5. 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% 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 5
Database Link:	NP_037257 Entrez Gene 6331 Human Entrez Gene 20271 Mouse Entrez Gene 25665 Rat P15389



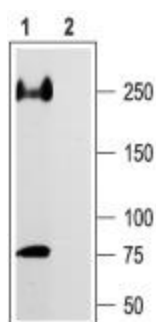
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Background:

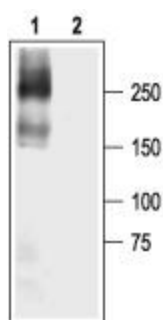
Voltage-gated Na⁺ channels (NaV) are responsible for myocardial conduction and maintenance of the cardiac rhythm and are essential for the generation of action potentials and cell excitability. Dysfunction or dysregulation of cardiac sodium channels can cause several disorders, including cardiac arrhythmias. The majority of Na⁺ channels in the mammalian heart are Tetrodotoxin (TTX)-insensitive NaV1.5. The putative structure of NaV1.5 consists of four homologous domains (I-IV), each containing six transmembrane segments (S1-S6). Mutations in the C-terminus of NaV1.5 were described in connection to Long QT syndrome and Brugada syndrome. Recent data have demonstrated selective expression of NaV1.5 in the mouse central nervous system and implicated a role for NaV1.5 in the physiology of the central nervous system.

Synonyms:

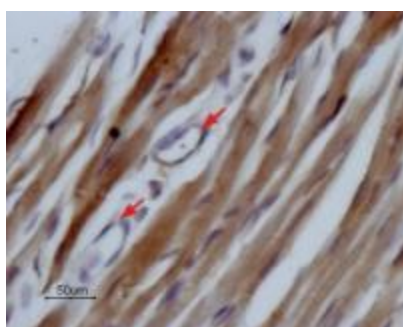
CDCD2; CMD1E; CMPD2; HB1; HB2; HBBD; HH1; ICCD; IVF; LQT3; Nav1.5; PFHB1; SSS1; VF1

Product images:

Western blot analysis of rat heart membranes: 1. Anti-Nav1.5 antibody, (1:200). 2. Anti-Nav1.5 antibody, preincubated with the control peptide antigen.



Western blot analysis of Nav1.5 in human-Nav1.5 transfected HEK-293 cells: 1. Anti-Nav1.5 antibody, (1:200). 2. Anti-Nav1.5 antibody, preincubated with the control peptide antigen.



Expression of Nav1.5 in rat heart. Immunohistochemical staining of Nav1.5 in rat myocardium paraffin-embedded sections using Anti-Nav1.5 antibody, (1:100). Staining is specific for cardiomyocytes while smooth muscle cells in the small vessels are negative (red arrows). Hematoxylin is used as the counterstain.