

Product datasheet for **TA328703**

Nav1.5 (SCN5A) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3,000; FC: 1:50-1:600
Reactivity:	Human, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	GST fusion protein with amino acid residues 1978-2016 of human Nav1.5. Intracellular, C-terminus.
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:	The serum was depleted of anti-GST antibodies by affinity chromatography on immobilized GST, and then anti-Nav1.5 antibody was affinity purified on immobilized Nav1.51978-2016.
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_000326 Entrez Gene 25665 Rat Entrez Gene 6331 Human Q14524



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Background:

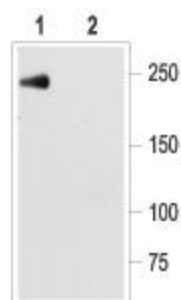
Voltage-gated Na⁺ channels (Nav) are responsible for myocardial conduction and maintenance of the cardiac rhythm and are essential for the generation of action potentials and cell excitability. Dysfunction or dysregulation of cardiac sodium channels can cause several disorders, including cardiac arrhythmias. 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 domain (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:

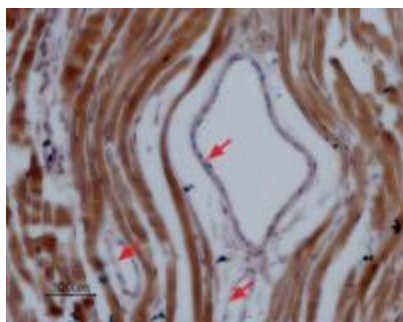
CDCD2; CMD1E; CMPD2; HB1; HB2; HBBD; HH1; ICCD; IVF; LQT3; Nav1.5; PFHB1; SSS1; VF1

Protein Families:

Druggable Genome, Ion Channels: Sodium, Transmembrane

Product images:

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



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