ARG56141
anti-Nav1.8 Na+ Channel antibody [S134-12]

Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [S134-12] recognizes Nav1.8 Na+ Channel
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Specificity	This antibody recognizes Human, Mouse, and Rat Nav1.8. It does not cross-react with other Nav channels.
Host	Mouse
Clonality	Monoclonal
Clone	S134-12
Isotype	IgG2a
Target Name	Nav1.8 Na+ Channel
Species	Rat
Immunogen	Fusion protein around aa. 1724-1956 (cytoplasmic C-terminus) of Rat Nav1.8
Conjugation	Un-conjugated
Alternate Names	Voltage-gated sodium channel subunit alpha Nav1.8; Nav1.8; PN3; Sodium channel protein type X subunit alpha; FEPS2; SNS; Sodium channel protein type 10 subunit alpha; Peripheral nerve sodium channel 3; hPN3

Application Instructions

Application table

Application	Dilution
ICC/IF	0.1 - 10 µg/ml
IHC-P	0.1 - 1 µg/ml
WB	1 - 10 µg/ml

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	Rat dorsal root ganglia or lysate of COS cells transiently expressing Nav1.8.

Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.4), 0.09% Sodium azide and 50% Glycerol.
Preservative	0.09% Sodium azide
Stabilizer	50% Glycerol

Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

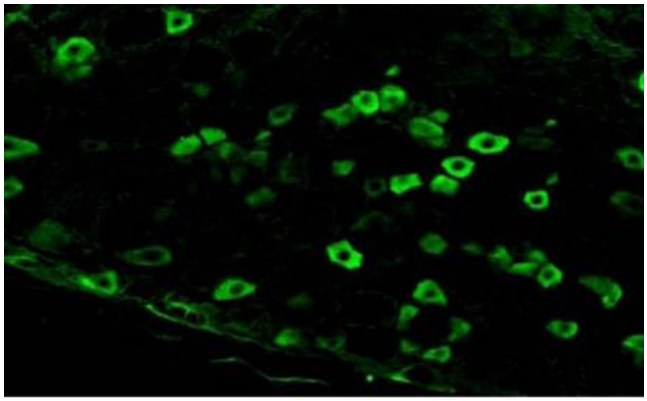
Bioinformation

Gene Symbol	SCN10A
Gene Full Name	sodium channel, voltage gated, type X alpha subunit
Background	The protein encoded by this gene is a tetrodotoxin-resistant voltage-gated sodium channel alpha subunit. The properties of the channel formed by the encoded transmembrane protein can be altered by interaction with different beta subunits. This protein may be involved in the onset of pain associated with peripheral neuropathy. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jun 2014]
Function	Tetrodotoxin-resistant channel that mediates the voltage-dependent sodium ion permeability of excitable membranes. Assuming opened or closed conformations in response to the voltage difference across the membrane, the protein forms a sodium-selective channel through which sodium ions may pass in accordance with their electrochemical gradient. Plays a role in neuropathic pain mechanisms. [UniProt]
Calculated Mw	221 kDa
PTM	Ubiquitinated by NEDD4L; which promotes its endocytosis. Phosphorylation at Ser-1451 by PKC in a highly conserved cytoplasmic loop slows inactivation of the sodium channel and reduces peak sodium currents. Lacks the cysteine which covalently binds the conotoxin GVIIJ. This cysteine (position 816) is speculated in other sodium channel subunits alpha to be implied in covalent binding with the sodium channel subunit beta-2 or beta-4.

Images

ARG56141 anti-Nav1.8 Na+ Channel antibody [S134-12] WB image

Western blot: 20 µg of Mouse brain lysate stained with ARG56141 anti-Nav1.8 Na+ Channel antibody [S134-12] at 1:500 dilution.



ARG56141 anti-Nav1.8 Na+ Channel antibody [S134-12] IF image

Immunofluorescence: Rat dorsal root ganglia cryosections stained with ARG56141 anti-Nav1.8 Na+ Channel antibody [S134-12].