ARG43743
anti-SCN1A antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes SCN1A
Tested Reactivity	Hu, Ms, Rat
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	SCN1A
Species	Human
Immunogen	Synthetic peptide corresponding to a sequence at the C-terminus of Human SCN1A. (ACPPSYDRVTKPIVEKHEQEGKDEKAKGK)
Conjugation	Un-conjugated
Alternate Names	DEE6; DRVT; FEB3; FHM3; NAC1; SCN1; SMEI; DEE6A; DEE6B; EIEE6; FEB3A; HBSCI; GEFSP2; Nav1.1; Sodium channel protein brain I subunit alpha; Sodium channel protein type I subunit alpha; Voltage-gated sodium channel subunit alpha Nav1.1

Application Instructions

Application table

Application	Dilution
WB	1:200 - 1:2000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Observed Size	~ 250 kDa

Properties

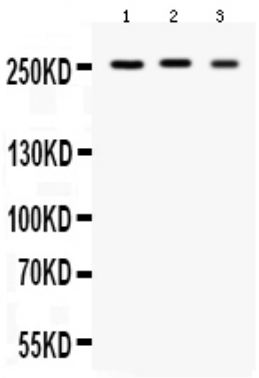
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.9% NaCl, 0.2% Na2HPO4, 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. 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	SCN1A
Gene Full Name	sodium voltage-gated channel alpha subunit 1
Background	Voltage-dependent sodium channels are heteromeric complexes that regulate sodium exchange between intracellular and extracellular spaces and are essential for the generation and propagation of action potentials in muscle cells and neurons. Each sodium channel is composed of a large pore-forming, glycosylated alpha subunit and two smaller beta subunits. This gene encodes a sodium channel alpha subunit, which has four homologous domains, each of which contains six transmembrane regions. Allelic variants of this gene are associated with generalized epilepsy with febrile seizures and epileptic encephalopathy. Alternative splicing results in multiple transcript variants. The RefSeq Project has decided to create four representative RefSeq records. Three of the transcript variants are supported by experimental evidence and the fourth contains alternate 5' untranslated exons, the exact combination of which have not been experimentally confirmed for the full-length transcript. [provided by RefSeq, Oct 2015]
Function	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 Na+ ions may pass in accordance with their electrochemical gradient. Plays a key role in brain, probably by regulating the moment when neurotransmitters are released in neurons. Involved in sensory perception of mechanical pain: activation in somatosensory neurons induces pain without neurogenic inflammation and produces hypersensitivity to mechanical, but not thermal stimuli. [UniProt]
Calculated Mw	229 kDa
PTM	Disulfide bond, Glycoprotein, Phosphoprotein. Phosphorylation at Ser-1516 by PKC in a highly conserved cytoplasmic loop slows inactivation of the sodium channel and reduces peak sodium currents. [UniProt]
Cellular Localization	Cell membrane; Multi-pass membrane protein. [UniProt]

Images



ARG43743 anti-SCN1A antibody WB image

Western blot: 50 µg of samples under reducing conditions. Rat brain, Mouse brain and U87-MG lysates stained with ARG43743 anti-SCN1A antibody at 0.5 µg/ml dilution, overnight at 4°C.