

Product Information

MemDX™ Membrane Protein Human SCN1A (Sodium voltage-gated channel alpha subunit

1) Full Length

Cat. No.: **MPC0699K**

This product is for research use only and is not intended for diagnostic use.

This product is a 228.9 kDa Human SCN1A membrane protein expressed in HEK293. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

Product Specifications

Host Species

Human

Target Protein

SCN1A

Protein Length

Full length

Protein Class

Transporter; Ion channel

Molecular Weight

228.9 kDa

TMD

24

Sequence

MEQTVLVPPGPDSFNFFFTRESLAAIERRIAEEKAKNPKPKDKDDDENGPK
PNSDLEAGKNLPFIYGDIPPEMVSEPLEDLPYYINKKTFIVLNKGKAIF
RFSATSALYILTPFNPLRKIAIKILVHSLFSMLIMCTILTNCVFMMSNP
PDWTKNVEYTFGTIYTFESLIKIIARGFCLEDFTLRDPWNWLDFTVITF
AYVTEFVDLGNVSALRTFRVLRALKTISVIPGLKTIVGALIQSVKKLSDV
MILTVFCLSVFALIGLQLFMGNLRNKCQWPPTNASLEEHSIEKNITVNY
NGTLINETVFEDWKSQYQDSRYHYFLEGFLDALLCGNSSDAGQCPEGYM
CVKAGRNPNGYTSFDTFSWAFLSLFRLMTQDFWENLYQLTLRAAGKTYM
IFFVLVIFLGSFYLINLILAVVAMAYEEQNQATLEEAQKEAEFQQMIEQ
LKKQQAQAATATASEHSREPSAAGRLSDSSSEASKLSKSAKERRNR
RKKRKQKEQSGGEEKDEDEFQKSESEDSIRKKGFRFSIEGNRLTYEKRY
SPHQSLLSIRGSLFSPRRNSRSLFSFRGRAKDVGSENDFADEHSTFED
NESRRDSLFPVRRHGERRNSNLSQTSRSSRMLAVFPANGKMHSTVDCNGV
VSLVGGPSVPTSPVGQLLPEVIIDKPATDDNGTTTETEMRKRSSSFHVS
MDFLEDPSQRQRAMSIASILTNTVEELEEESRQKCPWCWYKFSNIFLIWDC
SPYWLVKVKHVVNLVMDPFVDLAITICIVLNTLFMAMEHYPMTHFNVL
TVGNLVFTGIFTAEMFLKIIAMDPYFFFQEGWNIFDGFIVTSLSLVELGLA
NVEGLSVLRSFRLLRVFKLAKSWPTLNMLIKIIGNSVGALGNLTLVLAI
VFIFAVVGMQLFGKSYKDCVCKIASDCQLPRWHMNDFFHSFLIVFRVLCG

EWIETMWDCMEVAGQAMCLTVFMMVMVIGNLVVLNLFALLSSFSADNL
AATDDDNEMNNLQIAVDRMHKGVAYVVKRIYEFIQQSFIKQKILDEIKP
LDDLNNKKDSCMSNHTAEIGKDL DYLDVNGTTSGIGTGSSVEKYIDES
DYMSFINNPSLTVTVPIAVGESDFENLNTEDFSSESLEESKEKLNESSE
SSEGSTVDIGAPVEEQPVVEPEETLEPEACFTEGCVQRFKCCQINVEEGR
GKQWWNLRRCTCFRIVEHNWFETFIVFMILLSSGALAFEDIYIDQRKTIKT
MLEYADKVFTYIFILEMLLKWVAYGYQTYFTNAWCWLDLIVDVSLVSLT
ANALGYSELGAIKSLRTRLRALRPLRALS RFEGMRVVVNALLGAIPSIMNV
LLVCLIFWLIFSIMGVNLFAGKFYHCINTTTGDRFDIEDVNNHTDCLKLI
ERNETARWKNVKNVNFNDFGFGYLSLLQVATFKGWM DIMYAAVDSRNVELQ
PKYEESLYMYLYFVFIIFGSFFTLNLFIGVIIDNFNQKKKFGGQDIFM
TEEQKKYYNAMKKLGSKPKPQPIPRPGNKFQGMVDFVTRQVFDISIMIL
ICLNMVTMMVETDDQSEYVTILSRINLVFIVLFTGECVLKLSLRHYFYF
TIGWNIFDFVVLVILSIVGMFLAELIEKYFVSPTLFRVIRLARIGRILRLI
KGAKGIRTL L FALMMSLPALFNIGLLLFLVMFIYAIFGMSNFAYVKREVG
IDDMFNFETFGNSMICLFQITTSAGWDGLLAPILNSKPPDCDPNKVNPGS
SVKGDCGNPSVGIFFFVSYIIISFLVVVNMYIAVILENFSVATEESAEP
SEDDFEMFYEVWEKFDPDATQFMEFEKLSQFAAALEPPLNLPQPNKLQLI
AMDLP MVSGDRIHCLDILFAFTKRVLGESGEMDALRIQMEERF MASNPSK
VSYQPITTTTLKRKQEEVSAV IQRAYRRHLLKRTVKQASFTYNKNKIKGG
ANLLIKEDMIIDRINENSITEKDTLTMSTAACPPSYDRVTKPIVEKHEQE
GKDEKAKGK

Product Description

Expression Systems

HEK293

Tag

Based on specific requirements

Protein Format

Detergent or based on specific requirements

Form

Liquid

Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°C or lower. Avoid freeze/thaw cycles.

Target

Target Protein

SCN1A

Full Name

Sodium voltage-gated channel alpha subunit 1

Introduction

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.

Alternative Names

DEE6; DRVT; FEB3; FHM3; NAC1; SCN1; SMEI; EIEE6; FEB3A; HBSCI; GEFSP2; Nav1.1; sodium channel protein type 1 subunit alpha; sodium channel protein type I subunit alpha; sodium channel protein, brain I alpha subunit; sodium channel voltage gated type 1 alpha subunit; sodium channel, voltage-gated, type I, alpha polypeptide; sodium channel, voltage-gated, type I, alpha subunit; voltage-gated sodium channel subunit alpha Nav1.1; SCN1A; Sodium voltage-gated channel alpha subunit 1

Gene ID

[6323](#)

UniProt ID

[P35498](#)