Datasheet for ABIN7043646

anti-SCN9A antibody (Intracellular)

1 Image

Go to Product page

Overview

Quantity:	25 µL
Target:	SCN9A
Binding Specificity:	AA 446-460, Intracellular
Reactivity:	Rat
Host:	Guinea Pig
Clonality:	Polyclonal
Conjugate:	This SCN9A antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Purpose:	A Guinea Pig Polyclonal Antibody to NaV1.7 (SCN9A) Channel
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)EFTSIGRSR IMGLSE, corresponding to amino acid residues 446-460 of rat NaV1.7
Isotype:	IgG
Specificity:	Intracellular loop between domains I and II
Predicted Reactivity:	Human,mouse - 13,15 amino acid residues identical
Characteristics:	Guinea pig Anti-Nav1.7 (SCN9A) Antibody is directed against an epitope of rat NaV1.7 channel. Guinea pig Anti-NaV1.7 (SCN9A) Antibody raised in guinea pigs can be used in western blot analysis. It has been designed to recognize NaV1.7 from rat, human and mouse samples. The antigen used to immunize guinea pigs is the same as Anti-NaV1.7 (SCN9A) Antibody

Product Details

	(ABIN7043647, ABIN7045229 and ABIN7045230) raised in rabbit. Our line of guinea pig antibodies enables more flexibility with our products such as multiplex staining studies, immunoprecipitation, etc.
Purification:	Affinity purified on immobilized antigen.

Target Details

Target:	SCN9A
Alternative Name:	SCN9A (SCN9A Products)
Background:	Voltage-gated sodium channel type IX subunit alpha, PN1, NENA, NE, ETHA,Voltage-gated sodium channels (NaV) are essential for the generation of action potentials and for cell excitability1. NaV channels are activated in response to depolarization and selectively allow the flow of Na+ ions. To date, nine NaV α subunits have been cloned and named NaV1.1-NaV1.94-5. The NaV channels are classified into two groups according to their sensitivity to tetrodotoxin (TTX): TTX-sensitive (NaV1.1, NaV1.2, NaV1.3, NaV1.4, NaV1.6 and NaV1.7) and TTX-resistant (NaV1.5, NaV1.8 and NaV1.9)2-3.Mammalian sodium channels are heterotrimers composed of a central, pore-forming α subunit and two auxiliary β subunits. The expression of the α subunit isoform is developmentally regulated and tissue specific. Na+ channels in the adult central nervous system and heart contain β1 through β4 subunits, whereas Na+ channels in adult skeletal muscle have only the β1 subunit6,8.NaV1.7 is predominantly expressed in dorsal root ganglions (DRG) of the peripheral nervous system. Dominant gain of function mutations in the NaV1.7 gene are associated with erythermalgia (a rare autosomal disease characterized by sporadic burning pain accompanied by redness and heat in the extremities).9-11 Loss of function mutations in NaV1.7 channels leads to complete ablation of pain perception in humans.11 These recent findings highlight the role of this NaV isoform and the subset of DRG neurons that express this channel in physiological pain sensation. Alternative names: NaV1.7 (SCN9A), Voltage-gated sodium channel type IX subunit alpha, PN1, NENA, NE, ETHA
Gene ID:	78956
NCBI Accession:	NM_002977
UniProt:	O08562

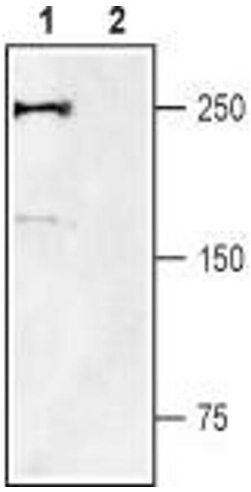
Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: N/A Application Dilutions Western blot wb: 1:400
Comment:	Negative Control: (ABIN7236859) Blocking Peptide: (ABIN7236859)
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Recosntitute with double distilled water (DDW) to a concentration of 1.0 mg/mL.
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).

Images



Western Blotting

Image 1. Western blot analysis of rat DRG lysates: - 1. Guinea pig Anti-NaV1.7 (SCN9A) Antibody (ABIN7043646, ABIN7045412 and ABIN7045413), (1:400).2. Guinea pig Anti-NaV1.7 (SCN9A) Antibody, preincubated with Nav1.7/SCN9A Blocking Peptide (#BLP-SC008). Following a broad screen of secondary antibodies, the following was used for this application:Western blot analysis:#106-035-006 (Jackson ImmunoResearch).Note: addition of 0.5 % Tween-20 to the primary antibody solution may strengthen the signal and lower background.