Datasheet for ABIN7581955

anti-SCN1A antibody (Extracellular)

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Overview

Quantity:	50 µL
Target:	SCN1A
Binding Specificity:	AA 311-324, Extracellular
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SCN1A antibody is un-conjugated
Application:	Immunohistochemistry (IHC), Western Blotting (WB)

Product Details

Purpose:	A Rabbit polyclonal antibody to Nav1.1 (extracellular)
Immunogen:	(C)EFDWKSYIQDSRYH, corresponding to amino acid residues 311 - 324 of mouse SCN1A
Sequence:	(C)EFDWKSYIQD SRYH
Isotype:	IgG
Specificity:	Extracellular, 3rd loop.
Predicted Reactivity:	Rat,human - identical
Characteristics:	Anti-SCN1A (NaV1.1) (extracellular) Antibody (ABIN7581955) is a highly specific antibody directed against an extracellular epitope of the mouse protein. The antibody can be used in western blot and immunohistochemistry applications. It has been designed to recognize Nav1.1 from mouse, rat and human samples.

Product Details

Purification:	Affinity purified on immobilized antigen.

Target Details

Target:	SCN1A
Alternative Name:	SCN1A (SCN1A Products)
Background:	Sodium channel protein type I subunit alpha, NAC1,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 subunit6,7. NaV1.1, also referred to as SCN1A, is a tetrodotoxin-sensitive channel and is broadly expressed in neurons7. Mutations in NaV1.1 are associated with at least two forms of epilepsy. Gain-of-function missense mutations are a primary cause of generalized epilepsy with febrile seizures plus (GEFS+). Loss-of-function mutations cause severe myoclonic epilepsy of infancy (SMEI)8,9.
Gene ID:	20265
UniProt:	A2APX8

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	0.2 mL double distilled water (DDW).
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4

Handling

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).