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Product datasheet

Anti-Scn1a antibody ab24820

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概述

产品名称	Anti-Scn1a抗体
描述	**兔多克隆抗体**to Scn1a
宿主	Rabbit
经测试应用	**适用于:** ICC/IF, IHC-P
种属反应性	**与反应:** Rat, Human **预测可用于:** Mouse, Rabbit, Zebrafish
免疫原	Synthetic peptide within Human Scn1a aa 1450-1550. The exact sequence is proprietary. Database link: **P35498**
常规说明	Ab with sodium azide is stable for 24 months when stored at 2-8 °C. **This product is FOR RESEARCH USE ONLY. For commercial use, please contact partnerships@abcam.com.** The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. Please see notes section.
存储溶液	pH: 7.60 Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA
纯度	Immunogen affinity purified
克隆	**多克隆**
同种型	IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab24820于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF		Use a concentration of 5 µg/ml.
IHC-P	★★★★☆ (1)	1/200. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

靶标

功能

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.

疾病相关

Defects in SCN1A are the cause of generalized epilepsy with febrile seizures plus type 2 (GEFS+2) [MIM:604233]. Generalized epilepsy with febrile seizures-plus refers to a rare autosomal dominant, familial condition with incomplete penetrance and large intrafamilial variability. Patients display febrile seizures persisting sometimes beyond the age of 6 years and/or a variety of afebrile seizure types. GEFS+ is a disease combining febrile seizures, generalized seizures often precipitated by fever at age 6 years or more, and partial seizures, with a variable degree of severity.

Defects in SCN1A are a cause of severe myoclonic epilepsy in infancy (SMEI) [MIM:607208]; also called Dravet syndrome. SMEI is a rare disorder characterized by generalized tonic, clonic, and tonic-clonic seizures that are initially induced by fever and begin during the first year of life. Later, patients also manifest other seizure types, including absence, myoclonic, and simple and complex partial seizures. Psychomotor development delay is observed around the second year of life. SMEI is considered to be the most severe phenotype within the spectrum of generalized epilepsies with febrile seizures-plus.

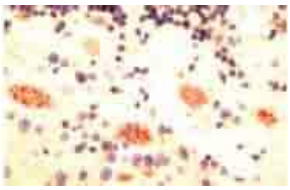
Defects in SCN1A are a cause of intractable childhood epilepsy with generalized tonic-clonic seizures (ICEGTC) [MIM:607208]. ICEGTC is a disorder characterized by generalized tonic-clonic seizures beginning usually in infancy and induced by fever. Seizures are associated with subsequent mental decline, as well as ataxia or hypotonia. ICEGTC is similar to SMEI, except for the absence of myoclonic seizures.

Defects in SCN1A are the cause of migraine familial hemiplegic type 3 (FHM3) [MIM:609634]. FHM3 is an autosomal dominant severe subtype of migraine with aura characterized by some degree of hemiparesis during the attacks. The episodes are associated with variable features of nausea, vomiting, photophobia, and phonophobia. Age at onset ranges from 6 to 15 years. FHM is occasionally associated with other neurologic symptoms such as cerebellar ataxia or epileptic seizures. A unique eye phenotype of elicited repetitive daily blindness has also been reported to be cosegregating with FHM in a single Swiss family.

Defects in SCN1A are the cause of familial febrile convulsions type 3A (FEB3A) [MIM:604403]; also known as familial febrile seizures 3. Febrile convulsions are seizures associated with febrile episodes in childhood without any evidence of intracranial infection or defined pathologic or traumatic cause. It is a common condition, affecting 2-5% of children aged 3 months to 5 years.

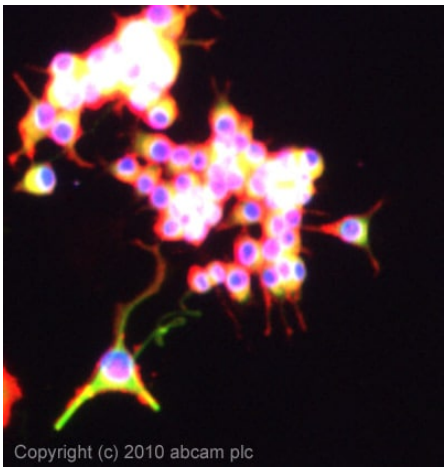
	The majority are simple febrile seizures (generally defined as generalized onset, single seizures with a duration of less than 30 minutes). Complex febrile seizures are characterized by focal onset, duration greater than 30 minutes, and/or more than one seizure in a 24 hour period. The likelihood of developing epilepsy following simple febrile seizures is low. Complex febrile seizures are associated with a moderately increased incidence of epilepsy.
序列相似性	Belongs to the sodium channel (TC 1.A.1.10) family. Nav1.1/SCN1A subfamily. Contains 1 IQ domain.
结构域	The sequence contains 4 internal repeats, each with 5 hydrophobic segments (S1,S2,S3,S5,S6) and one positively charged segment (S4). Segments S4 are probably the voltage-sensors and are characterized by a series of positively charged amino acids at every third position.
细胞定位	Membrane.

图片



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Scn1a antibody (ab24820)

Staining of human cerebellum with anti-sodium channel antibody. The tissue was boiled in 10mM citrate buffer, pH 6.0 for 10 mins followed by cooling at room temparture for 20 mins. The working dilution for the antibody is 1:200 for 30 min at room temparture.



Immunocytochemistry/ Immunofluorescence - Anti-Scn1a antibody (ab24820)

ICC/IF image of ab24820 stained PC12 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab24820, 5µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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