

Rabbit SCN2A Polyclonal Antibody | anti-SCN2A antibody

Anti-SCN2A Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125619	Rabbit	Human, Mouse, Rat	Flow Cytometry, Functional Assay, Western Blot

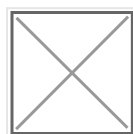
PRODUCT SYNONYMS

SCN2A; Polyclonal Antibody; Anti-SCN2A Antibody; NAC2; SCN2A1; SCN2A2; Sodium channel protein type 2 subunit alpha; HBSC II; Sodium channel protein brain II subunit alpha; Sodium channel protein type II subunit alpha; Voltage-gated sodium channel subunit alpha Nav1. 2; sodium voltage-gated channel alpha subunit 2; anti-SCN2A antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.005mg NaN3.
Applicable Applications for anti-SCN2A antibody	FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	A synthetic peptide corresponding to a sequence of human SCN2A (RTVSIFNWDEYIEDKSH).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Lab recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG () for Western blot.
Preparation and Storage	Store at -20 degree C. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of U2OS cells using anti-SCN2A antibody (AAA125619). Overlay histogram showing U2OS cells stained with AAA125619 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-SCN2A Antibody (AAA125619, 1µg/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG (5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)

Figure 1. Western blot analysis of SCN2A using anti-SCN2A antibody (AAA125619). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat brain tissue lysates Lane 2: mouse brain tissue lysates Lane 3: rat C6 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with rabbit anti-SCN2A antigen affinity purified polyclonal antibody (Catalog # AAA125619) at 0. 5 µg/mL overnight at 4 degree C, then washed with TBS-0. 1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1. 5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for SCN2A at approximately 320KD. The expected band size for SCN2A is at 320KD.

ADDITIONAL INFORMATION

Related Product Information for anti-SCN2A antibody	Navalpa1. 2, also known as the sodium channel, voltage-gated, type II, alpha subunit is a protein that in humans is encoded by the SCN2A gene. Voltage-gated sodium channels are transmembrane glycoprotein complexes composed of a large alpha subunit with four repeat domains, each of which is composed of six membrane-spanning segments, and one or more regulatory beta subunits. Voltage-gated sodium channels function in the generation and propagation of action potentials in neurons and muscle. This gene encodes one member of the sodium channel alpha subunit gene family. Allelic variants of this gene are associated with seizure disorders and autism spectrum disorder. Alternative splicing results in multiple transcript variants.
References	1. Ahmed, C. M. I., Ware, D. H., Lee, S. C., Patten, C. D., Ferrer-Montiel, A. V., Schinder, A. F., McPherson, J. D., Wagner-McPherson, C. B., Wasmuth, J. J., Evans, G. A., Montal, M. Primary structure, chromosomal localization, and functional expression of a voltage-gated sodium channel from human brain. Proc. Nat. Acad. Sci. 89: 8220-8224, 1992. 2. Berecki, G., Howell, K. B., Deerasooriya, Y. H., Cilio M. T., Oliva, M. K., Kaplan, D, Scheffer, I. E., Berkovic, S. F., Petrou, S. Dynamic action potential clamp predicts functional separation in mild familial and severe de novo forms of SCN2A epilepsy. Proc. Nat. Acad. Sci. 115: E5516-E5525, 2018. Note: Electronic Article. 3. Berkovic, S. F., Heron, S. E., Giordano, L., Marini, C., Guerrini, R., Kaplan, R. E., Gambardella, A., Steinlein, O. K., Grinton, B. E., Dean, J. T., Bordo, L., Hodgson, B. L., Yamamoto, T., Mulley, J. C., Zara, F., Scheffer, I. E. Benign familial neonatal-infantile seizures: characterization of a new sodium channelopathy. Ann. Neurol. 55: 550-557, 2004.

NCBI AND UNIPROT INFORMATION

NCBI GI #	93141212
NCBI GeneID	6326
NCBI Accession #	NP_001035232.1
NCBI GenBank Nucleotide #	NM_001040142.1
UniProt Accession #	Q99250; Q14472; Q53T77; Q9BZC9; Q9BZD0; A6NC14; A6NIQ5
NCBI Official Full Name	sodium channel protein type 2 subunit alpha isoform 1
NCBI Official Synonym Full Names	sodium channel, voltage-gated, type II, alpha subunit
NCBI Official Symbol	SCN2A
NCBI Official Synonym Symbols	HBA; NAC2; BFIC3; BFIS3; BFNIS; HBSCI; EIEE11; HBSCII; Nav1.2; SCN2A1; SCN2A2; Na(v)1.2
NCBI Protein Information	sodium channel protein type 2 subunit alpha; HBSC II; voltage-gated sodium channel subtype II; sodium channel protein type II subunit alpha; sodium channel protein brain II subunit alpha; voltage-gated sodium channel subunit alpha Nav1.2; sodium channel p
UniProt Protein Name	Sodium channel protein type 2 subunit alpha
UniProt Gene Name	SCN2A
UniProt Synonym Gene Names	NAC2; SCN2A1; SCN2A2
UniProt Entry Name	SCN2A_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/scn2a-antibody-flow-cytometry-western-blot-elisa/125619>