

Anti-SCN9A Neutralizing Antibody (V3S-0622-YC2548)

Cat. No.: V3S-0622-YC2548

Summary

Description	This product is a human monoclonal antibody that reacts with SCN9A. The antibody is expressed with mammalian cell transient expression system, serum-free and purified by affinity chromatography. The purity and integrity are tested via SDS-PAGE and SEC-HPLC analysis. Given an antigen, additional QC measures are also desired such as affinity testing and binding validation. Specifically, the antibody is provided in multiple formats for in vivo and in vitro assays. The <i>In vivo</i> version features greater than 95% purity, ultra-low endotoxin levels (<1 EU/mg or 0.1 EU/mg), and is preservative, stabilizer, and carrier protein-free.
Clonality	Monoclonal
Host Species	Human
Target Species	Human
Immunogen	Extracellular loops 3-1, or 3-3, or from the paddle region (loop 2-1) of human Nav1.7
Isotype	IgG
Isotype Control	C34555
Secondary Antibody	C32400; C75370; C10513; C51635; C45530

Property

Expression Species	HEK293F or CHO
Conjugation	None
Purity	>95%, determined by SDS-PAGE and/or SEC-HPLC
Endotoxin	<1 EU/mg, determined by LAL method
Purification	Protein A affinity purified
Sterility	0.2 µM filtered
Formulation	PBS, pH 7.4
Preservation	No preservatives
Stabilizer	No stabilizers
Storage	Store at 4°C within a week. For longer storage, aliquot and store at -20°C.

For lab research use only, not for diagnostic, therapeutic or any *in vivo* human use.

Applications

Application	FuncS
Application Notes	The antibody is recommended for detection of SCN9A by FuncS assay.

Target

Target	SCN9A
Alternative Name	SCN9A; sodium channel, voltage gated, type IX alpha subunit; PN1; ETHA; NENA; SFNP; F EB3B; NE-NA; GEFSP7; HSN2D; Nav1.7; sodium channel protein type 9 subunit alpha; hN E-Na; peripheral sodium channel 1; neuroendocrine sodium channel; sodium channel protein type IX subunit alpha; voltage-gated sodium channel alpha subunit Nav1.7; voltage-gated so dium channel subunit alpha Nav1.7; sodium channel, voltage-gated, type IX, alpha subunit; s odium channel, voltage-gated, type IX, alpha polypeptide
Gene ID	6335
UniProt	Q15858
Introduction	This is a voltage-gated sodium channel which plays a significant role in nociception signaling. Mutations in this gene have been associated with primary erythralgia, channelopathy-asso ciated insensitivity to pain, and paroxysmal extreme pain disorder.
Research Area	Neuroscience
Proceedings of R&D	Diseases associated with SCN9A include Paroxysmal Extreme Pain Disorder and Indifferenc e To Pain, Congenital, Autosomal Recessive. Among its related pathways are Cardiac conduc tion and Neuropathic Pain-Signaling in Dorsal Horn Neurons. Gene Ontology (GO) annotatio ns related to this gene include ion channel activity and sodium ion binding. An important paral og of this gene is SCN2A.

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