



Human SCN5A peptide (DAG-P0792)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	The protein encoded by this gene is an integral membrane protein and tetrodotoxin-resistant voltage-gated sodium channel subunit. This protein is found primarily in cardiac muscle and is responsible for the initial upstroke of the action potential in an electrocardiogram. Defects in this gene are a cause of long QT syndrome type 3 (LQT3), an autosomal dominant cardiac disease. Alternative splicing results in several transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]
Specificity	Found in jejunal circular smooth muscle cells (at protein level). Expressed in human atrial and ventricular cardiac muscle but not in adult skeletal muscle, brain, myometrium, liver, or spleen. Isoform 4 is expressed in brain.
Purity	70 - 90% by HPLC.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the sodium channel (TC 1.A.1.10) family. Nav1.5/SCN5A subfamily.Contains 1 IQ domain.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	SCN5A sodium channel, voltage-gated, type V, alpha subunit [Homo sapiens (human)]
Official Symbol	SCN5A

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Synonyms SCN5A; sodium channel, voltage-gated, type V, alpha subunit; HB1; HB2; HH1; IVF; VF1; HBBD; ICCD; LQT3; SSS1; CDCD2; CMD1E; CMPD2; PFHB1; Nav1.5; sodium channel protein type 5 subunit alpha; voltage-gated sodium channel subunit alpha Nav1.5; sodium channel protein cardiac muscle subunit alpha; cardiac tetrodotoxin-insensitive voltagedependent sodium channel alpha subunit; **Entrez Gene ID** <u>6331</u> NM 000335.4 mRNA Refseq **Protein Refseq** NP 000326.2 UniProt ID Q14524 **Chromosome Location** 3p21 **Pathway** Adrenergic signaling in cardiomyocytes, organism-specific biosystem; Adrenergic signaling in cardiomyocytes, conserved biosystem; Axon guidance, organism-specific biosystem; Cardiac Progenitor Differentiation, organism-specific biosystem; Developmental Biology, organismspecific biosystem; Interaction between L1 and Ankyrins, organism-specific biosystem; L1CAM interactions, organism-specific biosystem; SIDS Susceptibility Pathways, organism-specific biosystem;

ankyrin binding; calmodulin binding; enzyme binding; fibroblast growth factor binding; ion channel binding; nitric-oxide synthase binding; protein binding; scaffold protein binding;

ubiquitin protein ligase binding; voltage-gated sodium channel activity;

Function