Human SCN3B Protein (His Tag)

Catalog Number: **13500-H08H**

General Information

Gene Name Synonym:

ATFB16; BRGDA7; HSA243396; SCNB3

Protein Construction:

A DNA sequence encoding the mature form of human SCN3B (Q9NY72) extracellular domain (Met1-Glu159) was expressed with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Phe 23

Molecular Mass:

The recombinant human SCN3B consists of 148 amino acids and predicts a molecular mass of 17.2 KDa. It migrates as an approximately 29 and?34 kDa due to different glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

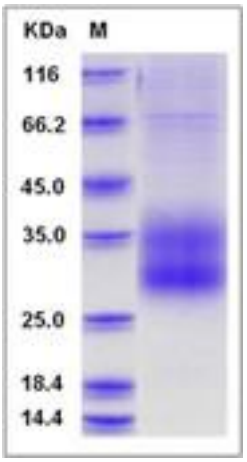
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

SCN3B (sodium channel, voltage-gated, type III, beta ,human IgG1-Fc chimera) belongs to the sodium channel auxiliary subunit SCN3B family. It contains 1 Ig-like C2-type (immunoglobulin-like) domain. Voltage-gated sodium channels are transmembrane glycoprotein complexes composed of a large alpha subunit and one or more regulatory beta subunits. They are responsible for the generation and propagation of action potentials in neurons and muscle. SCN3B gene encodes one member of the sodium channel beta subunit gene family, and influences the inactivation kinetics of the sodium channel. Two alternatively spliced variants, encoding the same protein, have been identified. Defects in SCN3B are the cause of Brugada syndrome type 7. A tachyarrhythmia characterized by right bundle branch block and ST segment elevation on an electrocardiogram. It can cause the ventricles to beat so fast that the blood is prevented from circulating efficiently in the body. When this situation occurs (called ventricular fibrillation), the individual will faint and may die in a few minutes if the heart is not reset.

References

1.Morgan K, *et al.* (2000) _3: An additional auxiliary subunit of the voltage-sensitive sodium channel that modulates channel gating with distinct kinetics. Proc Natl Acad Sci. 97(5):2308-13. 2.Hartley JL, *et al.* (2001) DNA Cloning Using In Vitro Site-Specific Recombination. Genome Res. 10(11): 1788-95. 3.Hirosawa M, *et al.* (2000) Characterization of cDNA clones selected by the GeneMark analysis from size-fractionated cDNA libraries from human brain. DNA Res. 6(5):329-36.