10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SCNM1 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP1446c

Specification

SCNM1 Antibody (Center) Blocking Peptide - Product Information

Primary Accession Q9BWG6

SCNM1 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 100534012;79005

Other Names
Sodium channel modifier 1, SCNM1

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP1446c was selected from the Center region of human SCNM1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SCNM1 Antibody (Center) Blocking Peptide - Protein Information

Name SCNM1

Function
As a component of the minor spliceosome, involved in the splicing of U12-type introns in pre-mRNAs (PubMed:36084634). Plays a role in the regulation of primary cilia length and Hedgehog signaling (PubMed:36084634).

Cellular Location
Nucleus, nucleoplasm. Nucleus speckle. Note=Colocalizes with LUC7L2 and SNRNP70 in nuclear speckles. {ECO:0000250|UniProtKB:Q8K136}

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SCNM1 Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

SCNM1 Antibody (Center) Blocking Peptide - Images

SCNM1 Antibody (Center) Blocking Peptide - Background

SCNM1 is a zinc finger protein and putative splicing factor that modifies phenotypic expression of Scn8a mutations in mouse models. Phylogenetic comparison of zinc finger sequences placed SCNM1 within the U1C subfamily of RNA binding proteins that are commonly found in RNA-processing proteins. The SCNM1 protein is localized exclusively to the nucleus. Mutations in the mouse Scn8a gene cause inherited movement disorders that range in severity from tremor to ataxia, dystonia, and juvenile lethality. The severity of the hypomorphic allele Scn8a(medJ) is determined by the unlinked modifier gene Scnm1. The modifier mutation, R187X, is characteristic of strain C57BL/6J and reduces the abundance of correctly spliced sodium channel transcripts below the threshold for survival. Mice with the Scn8a(medJ) mutation on any strain except C57BL/6J have 10% of Scn8a transcript correctly spliced and develop a progressive disorder with dystonia and ataxia but live longer than 1.5 years. The same mutation on a C57BL/6J background results in only 5% of correctly spliced transcript, leading to paralysis and survival less than one month.

SCNM1 Antibody (Center) Blocking Peptide - References

Buchner, D.A., et al., Science 301(5635):967-969 (2003).Adams, M.D., et al., Nature 377 (6547 Suppl), 3-174 (1995).