

Product datasheet for SC311016

OriGene Technologies, Inc.

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C19orf46 (SYNE4) (NM_001039876) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: C19orf46 (SYNE4) (NM_001039876) Human Untagged Clone

Tag: Tag Free Symbol: SYNE4

Synonyms: C19orf46; DFNB76; KASH4; Nesp4

Mammalian Cell

Selection:

Neomycin

Vector: pCMV6-Entry (PS100001) **E. coli Selection:** Kanamycin (25 ug/mL)

Fully Sequenced ORF: >SC311016 representing NM_001039876.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

AGAGAGGCGGACATTGTTGGATGCACCGTCTGCCCCGCGTCCGGAGAGGAGCACCAGAGCCCAGAGCAG GCCCAGACCCTGGGACAGGACTCCTTGGGCCCTCCTGAGCACTTCCAGGGTGGGCCAAGGGGCAATGAG CCTGCCGCTCACCCCCGAGATGGTCAACACCCTCTTCCTACGAGGACCCAGCTGGGGGCAAACACTGT GAGCACCCCATTTCTGGCCTGGAGGTACTAGAGGCTGAGCAGAACAGCCTGCACCTGTGCCTGCTGGGG CTGGGCCGCCGCTGCAGGACCTGGAGCAAGGCCTGGGGCACTGGGCATTGGCCCAGAGTGGGATGGTG CAGCTGCAGGCCCTCCAGGTGGACCTACGAGGGGCAGCTGAGCGTGTGGAGGCGCTGCTAGCGTTTGGT GAGGGGCTGGCACAGCGGAGTGAGCCCAGGGCCTGGGCAGCCCTGGAGCAGATCCTGCGGGCCCTGGGA GCTTACCGAGACTCCATCTTCCGGCGGCTCTGGCAGCTGCAGGCCCAGCTGGTCAGCTACAGCCTGGTG TTCGAGGAGGCCAACACGCTGGACCAGGACTTGGAGGTCGAGGGAGACTCGGACTGGCCAGGACCTGGT GGGGTCTGGGGGCCCTGGGCACCCAGTAGCCTCCCCACTTCCACAGAGTTGGAGTGGGATCCGGCGGGG GACATTGGGGGCCTTGGGCCCTTGGGACAAAAGACAGCCCGGACACTAGGAGTGCCCTGTGAGCTGTGT GGCCAGAGGGGGCCCCAGGGCAGGGGACAAGGCCTTGAGGAAGCAGACACCTCTCACTCCCGACAGGAC ATGCTGGAGTCTGGCCTCGGCCACCAGAAACGCTTAGCACGTCACCAAAGACACTCCCTGCTCCGGAAG CCTCAGGACAAGAAGAGGCAAGCATCTCCTCATCTCCAGGATGTGAGGCTGGAGGGGAATCCAGGGGCC CCCGATCCTGCATCCAGGCAGCCTCTGACCTTCCTCCTTATCCTCTTCCTCCTCCTCCTGGTG GGTGCCATGTTTCTCCTGCCCGCGTCAGGAGGCCCCTGCTGCTCCTCATGCCCGAATACCCAGGACACCC

TACCTGGTGCTCAGCTATGTCAATGGTCTTCCCCCAGTCTGA

ACGCGTACGCGCCCCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

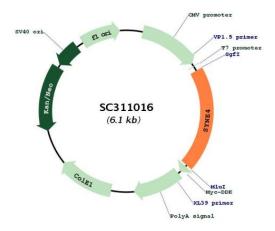
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul





Plasmid Map:



ACCN: NM 001039876

Insert Size: 1215 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

19q13.12

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 001039876.2</u>

 RefSeq Size:
 1375 bp

 RefSeq ORF:
 1215 bp

 Locus ID:
 163183

 UniProt ID:
 Q8N205

Cytogenetics:



C19orf46 (SYNE4) (NM_001039876) Human Untagged Clone - SC311016

Protein Families: Transmembrane

MW: 43.5 kDa

Gene Summary: This gene is a member of the nesprin family of genes, that encode KASH (Klarsicht, Anc-1,

Syne Homology) domain-containing proteins. In addition to the KASH domain, this protein also contains a coiled-coil and leucine zipper region, a spectrin repeat, and a kinesin-1 binding region. This protein localizes to the outer nuclear membrane, and is part of the linker of nucleoskeleton and cytoskeleton (LINC) complex in the nuclear envelope. LINC complexes are formed by SUN (Sad1, UNC-84)-KASH pairs, and are thought to mechanically couple nuclear components to the cytoskeleton. Mutations in this gene have been associated with progressive high-frequency hearing loss. The absence of this protein in mice also caused hearing loss, and changes in hair cell morphology in the ears. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Aug 2015] Transcript Variant: This variant (1) represents the longer transcript and encodes the longer

isoform (1).