

Product datasheet for **SC100655**

Nicastrin (NCSTN) (NM_015331) Human Untagged Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | Nicastrin (NCSTN) (NM_015331) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | Nicastrin |
| Synonyms: | ATAG1874 |
| Mammalian Cell Selection: | None |
| Vector: | <u>pCMV6-XL4</u> |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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Fully Sequenced ORF: >OriGene ORF within SC100655 sequence for NM_015331 edited (data generated by NextGen Sequencing)

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ATGGCTACGGCAGGGGTGGCTCTGGGGCTGACCCGGGAAGTCGGGGTCTCCTTCGCCTT
CTGTCTTTCTGCGTCCTACTAGCAGGTTTGTGCAGGGGAACTCAGTGGAGAGGAAGATA
TATATCCCCTTAAATAAAACAGCTCCCTGTGTTTCGCCTGCTCAACGCCACTCATCAGATT
GGCTGCCAGTCTTCAATTAGTGGAGACACAGGGTTATCCACGTAGTAGAGAAAGAGGAG
GACCTACAGTGGGTATTGACTGATGGCCCAACCCCTTACATGGTTCTGCTGGAGAGC
AAGCATTTTACCAGGGATTTAATGGAGAAGCTGAAAGGGAGAACCAGCCGAATTGCTGGT
CTTGACAGTGCCTTGACCAAGCCAGTCTGCCTCAGGCTTCTCTCTAGTGTACAGTGC
CCAAATGATGGGTTTGGTGTACTCCAATTCCTATGGGCCAGAGTTTGTCACTGCAGA
GAAATACAGTGGAAATTCGCTGGGCAATGGTTTGGCTTATGAAGACTTTAGTTTCCCATC
TTTCTTCTGAAGATGAAATGAAACAAAGTCATCAAGCAGTGCATCAAGATCACAAC
CTGAGTCAGAATGGCTCAGCACCAACCTTCCCCTATGTGCCATGCAGCTTTTTACAC
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AGCATCAACCCAGAAATCGTCTGTGACCCCTGTCTGATTACAATGTGTGGAGCATGCTA
AAGCCTATAAATACAACGGGACATTAAGCCTGACGACAGGGTGTGGTTGCTGCCACC
CGGCTGGATAGTCGTTCTTTTTCTGGAATGTGGCCCCAGGGGCTGAAAGCGCAGTGGCT
TCCTTTGTCAACCCAGCTGGCTGCTGCTGAAGCTTTGAAAAGGCACCTGATGTGACCACC
CTGCCCCGCAATGTCATGTTTGTCTTTCAAGGGGAACTTTTACTACATTGGCAGC
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TTTCTCATCGCCAGCAAAGAGCTTGAGTTGATCACCTGACAGTGGGCTTCGGCATCCTC
ATCTTCTCCCTCATCGTCACCTACTGCATCAATGCCAAAGCTGATGTCCTTTTATTGCT
CCCCGGGAGCCAGGAGCTGTGCATACTGA
    
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Clone variation with respect to NM_015331.2

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_015331 unedited
 GATTTTGTAAACGACTTACTATAGGGCGGCCGGAATTCGGCACCGCGCTAACAGACAG
 AGCCGAACGGGGGCTTCCGCTCAGCAGAGAGGCAAGATGGCTACGGCAGGGGGTGGCTCT
 GGGGCTGACCCGGGAAGTCGGGGTCTCCTTCGCCTTCTGTCTTTCTGCGTCTACTAGCA
 GGTTTGTGCAGGGGAACTCAGTGGAGAGGAAGATATATATCCCTTAAATAAACAGCT
 CCCTGTGTTCCGCTGCTCAACGCCACTCATCAGATTGGCTGCCAGTCTTCAATTAGTGGA
 GACACAGGGGTTATCCACGTAGTAGAGAAAGAGGAGACCTACAGTGGGTATTGACTGAT
 GGCCCAACCCCTTACATGGTTCTGCTGGAGAGCAAGCATTTTACCAGGGATTTAATG
 GAGAAGCTGAAAGGGAGAACCAGCCGAATTGCTGGTCTTGCAGTGTCCTTGACCAAGCCC
 AGTCTGCCTCAGGCTTCTCCTAGTGTACAGTGCCCAATGATGGGTTTGGTGTTTAC
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 AATGGTTTGGCTTATGAAGACTTGTAGTTTCCCATCTTTCTTGAAGATGAAAATGAA
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 ACCTTCCCACTATGTCCATGCAGCTCTTTTACACATGCATGCTGCATCAGCACTGCC
 ACCTGCATGCNGCGCAGCTCCATCCAAAGCACCTTCAGCATCAACCCAGAAATCGTCTGT
 GACCCCTGTCTGATTACCATGTGTGGAGCATGCTAAAGCCTATNAATACCACTGGGACA
 TTAAGCCTGACGACAGGGTTGTGGNTTGTGCACCNNGCTGATAAGTCGTCCTTTTTCT
 GGATGTGGCCCCAGGGGCTGAAGCGCATGGCTTCTTTGTACCACTGGCG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_015331 unedited
 GGGGGGTGAAAGTCAATGCTTTTTGATGNCAACTCTTAGTATATATTTACAAAAGCAATA
 AGGAAAAAGACAAAAACAAAATAGATATTACAGCTTAATAAAAAGTACAACCTGAGCACT
 GTGGGCTGGAGGTGGGATACCCACCCGCAGCACGCCACCTAATGTGCCATCTGAGGGC
 CTGCCACAAAGGACAGTGGGCAACGAGACAGTAGGCTCAGCCCATATATTCCTCTGTCT
 CAGGGGCTCAATGTACCTTGACCCTGACATTAACCTTTTATGTACCTTCCCAGTCACGA
 AGGTGGCTTGGGTACATTGGATGCGGGCGCGCGATCATTATAGAGGTACAGGGCAGGA
 AGGAAAAAGTAGAAGGGTCTGAAGGGCCAATTATGGTGGTAAC TAGGGAGTTAAACAG
 GAGCAAGAAGCTTCTATTTGTAATCCCGCCCTTGGCATGACGCCGAGAAGGAAGAGGAA
 ATGGGGAAGGGGTGATGGGAAAGGGGAGCGGATTGAAGTATAATCGGTGACTTTCTAC
 ACCGATTTTCGGAATTTGCCATATTTTTTTTCCCGCTATTTTTTCCGCCCTCCAT
 CCCCCGAAATTAATGTTATGGGTTTTCACTTTACGGCGCCACCTCTCCATTCACCCCC
 CTGATTGTTTCTCCCATGAGCCCCCTTTTGTGGCGCCAATTGGACCAGCGGTATT
 AGTTCCCACTGATTTGTATTTGTGCATAAAACGAGAGGATTGCGCCGTTTTTATGTTGTC
 CCGACTGTTGGTCTGCCTGACTCTAATCGGCTGTAATGGGCCGTATAGAATTACGTTT
 AGGCCCGTGCCTGTTTTTCTCCGTTTGTGTCGCCCCCCCCCCCCGTTTTTTGTTT
 TATTTN

Restriction Sites:

Please inquire

ACCN:

NM_015331

Insert Size:

3000 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).

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.
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: [NM_015331.2](#), [NP_056146.1](#)

RefSeq Size: 2944 bp

RefSeq ORF: 2130 bp

Locus ID: 23385

UniProt ID: [Q92542](#)

Cytogenetics: 1q23.2

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Alzheimer's disease, Notch signaling pathway

Gene Summary: This gene encodes a type I transmembrane glycoprotein that is an integral component of the multimeric gamma-secretase complex. The encoded protein cleaves integral membrane proteins, including Notch receptors and beta-amyloid precursor protein, and may be a stabilizing cofactor required for gamma-secretase complex assembly. The cleavage of beta-amyloid precursor protein yields amyloid beta peptide, the main component of the neuritic plaque and the hallmark lesion in the brains of patients with Alzheimer's disease; however, the nature of the encoded protein's role in Alzheimer's disease is not known for certain. Mutations in this gene are associated with familial acne inversa. A pseudogene of this gene is present on chromosome 21. Alternatively spliced transcript variants of this gene have been described, but the full-length nature of some of these variants has not been determined. [provided by RefSeq, Feb 2014]

Transcript Variant: This variant (1) encodes the longest isoform (1).