

## Product datasheet for **RC239314**

### Nicastrin (NCSTN) (NM\_001290184) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Nicastrin (NCSTN) (NM_001290184) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NCSTN
Synonyms:	ATAG1874
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide  
Sequence:

>RC239314 representing NM\_001290184  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGGACTTAAATCTCATTTTAGAAAGTTTGTGCAGGGGAAACTCAGTGGAGAGGAAGATATATATCCCTT  
 TAAATAAACAGCTCCCTGTGTTTCGCCTGCTCAACGCCACTCATCAGATTGGCTGCCAGTCTTCAATTAG  
 TGGAGACACAGGGTTATCCACGTAGTAGAGAAAAGAGGAGGACCTACAGTGGGTATTGACTGATGGCCCC  
 AACCCCTTACATGGTTCTGCTGGAGAGCAAGCATTACCAGGGATTTAATGGAGAAGCTGAAAGGGA  
 GAACCAGCCGAATTGCTGGTCTTGCAGTGTCTTGACCAAGCCAGTCTGCCTCAGGCTTCTCTCTAG  
 TGTACAGTGCCAAATGATGGGTTTGGTGTACTCCAATTCCTATGGGCCAGAGTTTGTCTACTGCAGA  
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 AAGATGAAATGAAACCAAGTCATCAAGCAGTGTATCAAGATCACACCTGAGTCAGAATGGCTCAGC  
 ACCAACCTTCCCCTATGTGCCATGCAGCTCTTTTACACATGCATGCTGTCATCAGCACTGCCACCTGC  
 ATGCGGGCAGCTCCATCCAAAGCACCTCAGCATCAACCCAGAAATCGTCTGTGACCCCTGTCTGATT  
 ACAATGTGTGGAGCATGCTAAAGCCTATAAATACAACCTGGGACATTAAAGCCTGACGACAGGGTTGTGGT  
 TGCTGCCACCCGGCTGGATAGTCGTTCTTTTTCTGGAATGTGGCCCCAGGGGCTGAAAGCGCAGTGGCT  
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 CTCAGCCCCACCAACCACTTATGTTGTACAGTATGCCTTGGCAAATTTGACTGGCACAGTGGTCAAC  
 CTCACCCGAGAGCAGTGCCAGGATCCAAGTAAAGTCCAAGTGAACAAGGATCTGTATGAGTACTCAT  
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 AGCCAGGGCCTTGTCTCCTGCCTTTGAACTGAGTCAGTGGAGCTCTACTGAATACTCTACATGGACTGAG  
 AGCCGCTGGAAAGATATCCGTGCCCGGATATTTCTCATCGCCAGCAAAGAGCTTGAGTTGATCACCTGA  
 CAGTGGGCTTCGGCATCCTCATCTTCTCCCTCATCGTCACCTACTGCATCAATGCCAAAGCTGATGTCCT  
 TTTCAATTGCTCCCCGGGAGCCAGGAGCTGTGTCATAC

ACGCGTACGCGGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC239314 representing NM\_001290184  
 Red=Cloning site Green=Tags(s)

MDFNLILES LCRGNSVERKIYIPLNKTAPCVRLLNATHQIGCQSSI SGGDTGVIHVVEKEEDLQWVLDGPNPPYMLLESKHFRDLMEKLGRTSRIAGLAVSLTKPSPASGFSPSVQCPNDGFGVYSNSYGPEFAHCR EIQWNSLGNGLAYEDFSFPIFLLEDENETKVIKQCYQDHNLSQNGSAPTFPLCAMQLFSHMHAVISTATC MRRSSIQSTFSINPEIVCDPLSDYNVWVSMKLPINTTGTLPDDR VVVAATRLDSRSFFWNVAPGAESAVA SFVTQLAAAEALQKAPDVTTLPRNVMFVFFQGETFDYIGSSRMVYDMEKGFVQLENVDSFVELGQVAL RTSLELWMHTDPVSQKNESVRNQVEDLLATLEKSGAGVPAVILRRPNQSQPLPPSSLQRFLRARNISGVV LADHSGAFHNKYQSIYDAENINVSYPEWLSPEEDLNFVTD TAKALADVATVLRALYELAGGTNFSDT VQADPQTVTRLLYGFLIKANNWFQSILRQDLRSYLDGGLQHYIAVSSPTNTTYVYQALANLTGTVVN LTREQCQDPSKVSENKDLYEYSWVQGPLHSNETDRLPRCVRSTARLARALSPAFELSQWSSTEYSTWTE SRWKDIRARIFLIASKELELITLVGFGILIFSLIVTYCINAKADVLFIAPREPGA VSY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

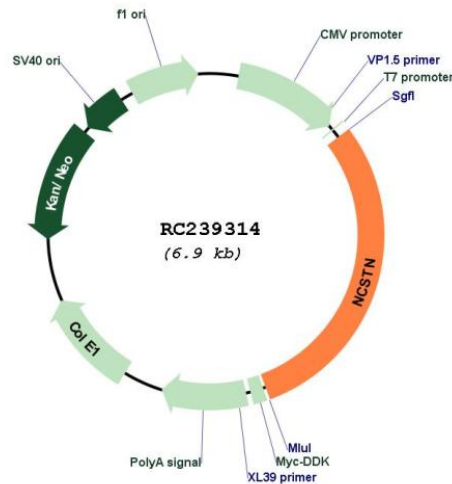
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



## Plasmid Map:



ACCN: NM\_001290184

ORF Size: 2067 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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\\_001290184.2](#)

RefSeq Size: 3083 bp

RefSeq ORF: 2070 bp

Locus ID: 23385

UniProt ID: [Q92542](#)

Cytogenetics: 1q23.2

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Alzheimer's disease, Notch signaling pathway

MW: 77.2 kDa

**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]