

Product datasheet for RC230717

Neogenin (NEO1) (NM_001172624) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Neogenin (NEO1) (NM_001172624) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NEO1
Synonyms:	IGDCC2; NGN; NTN1R2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC230717 representing NM_001172624 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGCGGAGCGGGAGCCCGCGACTCCTCAGCACCCCTCCTTCTGGCTCTACTGCCTGCTGCTGC
TCGGGCGCGGGCGCCGGGCGCCGCGGCCAGGAGCGGCTCCGCGCCGAGTCCCAGGAGCCAGCAT
TCGAACGTTCACTCCATTTTATTTCTGGTGGAGCCGGTGGATACACTCTCAGTTAGAGGCTCTTCTGTT
ATATAACTGTTTCAGCATATTCTGAGCCTTCTCCAAAAATTGAATGGAAAAAGATGAACTTTTTTAA
ACTTAGTATCAGATGATCGACGCCAGCTTCTCCGGATGGATCTTTATTTATCAGCAATGTGGTGCATTC
CAAACACAATAAACCTGATGAAGGTTATTATCAGTGTGTGGCCACTGTTGAGAGTCTTGGAACTATTATC
AGTAGAACAGCGAAGCTCATAGTAGCAGGCTTCCAAGATTTACCAGCCAACCAGAACCTTCTCAGTTT
ATGCTGGGAACAATGCAATTCTGAATTGTGAAGTTAATGCAGATTTGGTCCCATTGTGAGGTGGGAACA
GAACAGACAACCCCTTCTTGGATGATAGAGTTATCAAACCTCCAAGTGAATGCTGGTTATCAGCAAT
GCAACTGAAGGAGATGGCGGCTTTATCGCTGCGTAGTGGAAAGTGGTGGCCACCAAAGTATAGTGATG
AAGTTGAATTGAAGTTCTTCCAGATCCTGAGGTGATATCAGACTTGGTATTTTTGAAACAGCCTTCTCC
CTTAGTCAGAGTCATTGGTCAGGATGTAGTGTGCCATGTGTGCTTCAGGACTTCTCACTCCAACCATT
AAATGGATGAAAAATGAGGAGGCACTTGACACAGAAAGCTCTGAAAGATTGGTATTGCTGCGAGGTGGTA
GCCTGGAGATCAGTGATGTTACTGAGGATGATGCTGGGACTTATTTTTGTATAGCTGATAATGAAATGA
GACAATTGAAGCTCAAGCAGAGCTTACAGTGCAAGCTCAACCTGAATTCCTGAAGCAGCCTACTAATATA
TATGCTCACGAATCTATGGATATTGATTTGAATGTGAAGTGACTGAAAAACCACTCCAAGTGTGAAGT
GGGTCAAAAATGGGATATGGTTATCCCAAGTATTATTTAAGATTGTAAGGAACATAATCTTCAAGT
TTTGGTCTGGTGAATCAGATGAAGGTTCTATCAGTGCATTGCTGAAAATGATGTTGAAATGCACAA
GCTGGAGCCCACTGATAATCCTTGAACATGCACCAGCCACAACGGGACCCTGCCTTCAGCTCCTCGGG
ATGTCGTGGCCTCCCTGGTCTCTACCCGTTTCATCAAATTGACGTGGCGGACACCTGCATCAGATCCTCA
CGGAGACAACCTTACCTACTCTGTGTTCTACCAAGGAAGGATTGCTAGGGAACGTGTTGAGAATACC
AGTCAACCAGGAGAGATGCAAGTAACCATTCAAACCTAATGCCAGCGACCGTGTACATCTTTAGAGTTA



[View online »](#)

TGGCTCAAATAAGCATGGCTCAGGAGAGAGTTTCCAGCTCCACTGCGAGTAGAAACACAACCTGAGGTTCA
GCTCCCTGGCCCAGCACCTAACCTTCGTGCATATGCAGCTTCGCCTACCTCCATCACTGTTACGTGGGAA
ACACCAGTGTCTGGCAATGGGAAATTCAGAATTATAAATTGACTACATGGAAAAGGGGACTGATAAAG
AACAGGATGTTGATGTTTCAAGTCACTCTTACACCATTAATGGGTTGAAAAAATATACAGAGTATAGTTT
CCGAGTGGTGGCCTACAATAAACATGGTCTGGAGTTCCACACCAGATGTTGCTGTTTCAACATTGTCA
GATGTTCCAGTGTCTCCTCAGAATCTGTCTTGAAGTGAAGAAATCAAAGATATTATGATTCACT
GGCAGCCACCTGCTCCAGCCACACAAAATGGGCAGATTACTGGCTACAAGATTCCGTAACGAAAGGCCTC
CCGAAAGAGTGATGTCACTGAGACCTTGGTAAGCGGGACACAGCTGTCTCAGCTGATTGAAGGCTTGTAT
CGGGGACTGAGTATAATTTCCGAGTGGCTGCTTAACAATCAATGGTACAGGCCCGCAACTGACTGGC
TGTCTGCTGAACTTTTGAAGTGACCTAGATGAAACTCGTGTTCTGAAGTGCCTAGCTCTCTTACAGT
ACGCCGCTCGTTACTAGCATCGTAGTGAGCTGGACTCCTCCAGAGAATCAGAACATTGTGGTCAGAGGT
TACGCCATTGGTTATGGCATTGGCAGCCCTCATGCCAGACCATCAAAGTGGACTATAAACAGCGCTATT
ACACCATGAAAACTGGATCCCAGCTCTCACTATGTGATTACCCTGAAAGCATTAAATAACGTGGGTGA
AGGCATCCCCCTGTATGAGAGTGTGTGACCAGGCCTCACACAGACACTTCTGAAGTTGATTTATTTGTT
ATTAATGTCCATACACTCCAGTCCAGATCCCCTCCATGATGCCACCAGTGGGAGTTTCAAGGCTTCCA
TTCTGAGTCATGACACCATCAGGATTACGTGGGACAGAACTCGCTGCCAAGCACCAGAAGATTACAGA
CTCCCCGATACTACACCGTCCGATGGAAAACCAACATCCCAGCAAACACCAAGTACAGAATGCAAAATGCA
ACCACTTTGAGTTATTTGGTGACTGGTTTAAAGCCGAATACACTCTATGAATTCTCTGTGATGGTGACCA
AAGGTCGAAGTCAAGTACATGGAGTATGACAGCCCATGGGACCACCTTTGAATTAGTTCGACTTCTCC
ACCCAAGGATGTGACTGTTGTGAGTAAAGAGGGGAAACCTAAGACCATAATTGTGAATTGGCAGCCTCCC
TCCGAAGCCAATGGCAAAATTACAGGTTACATCATATATTACAGTACAGATGTGAATGCAGAGATACATG
ACTGGGTTATTGAGCCTGTTGTGGAAACAGACTGACTCACCAGATACAAGAGTTAACTTTGACACACC
ATACTACTTCAAATCCAGGCACGGAACCTCAAAGGGCATGGGACCCATGTCTGAAGCTGTCCAATCAGA
ACACCTAAAGCCTCAGGGTCTGGAGGAAAGGAAGCCGGCTGCCAGACCTAGGATCCGACTACAAACCTC
CAATGAGCGGCAGTAAACGCCCTCATGGGAGCCCCACCTCTCCTCTGGACAGTAATATGCTGCTGGTCA
AATTGTTTCTGTTGGCGTCATCACCATCGTGGTGGTTGTGATTATCGCTGTCTTTTGTACCCGCTGTA
ACCTCTCACCAGAAAAAGAAACGAGCTGCCTGCAATCAGTGAATGGCTCTCATAAGTACAAAGGGAATT
CCAAAGATGTGAAACCTCCAGATCTCTGGATCCATCATGAGAGACTGGAGCTGAAACCCATTGATAAGTC
TCCAGACCCAAACCCATCATGACTGATACTCCAATTCCTCGCAACTCTCAAGATATCACACCAGTTGAC
AACTCCATGGACAGCAATATCCATCAAAGGCGAAATTCATACAGAGGGCATGAGTCAGAGGACAGCATGT
CTACACTGGCTGGAAGGCGAGGAATGAGACCAAAAATGATGATGCCCTTTGACTCCAGCCACCCAGCC
TGTGATTAGTGCCATCCATCCATTCCCTCGATAACCCTCACCATCATTCCACTCCAGCAGCCTCGCT
TCTCCAGCTCGCAGTCATCTCTACCACCCGGGAGCCCATGGCCATTGGCACATCCATGTCCCTTTGAG
ACAGGGCAATTCACAGAAATCCGTTTCAAATACCCCCAGCACTGACACCATGCCAGCCTCTTCTGCTCA
AACATGCTGCACTGATCACCAGGACCCTGAAGGTGCTACCAGCTCCTTACTTGGCCAGCTCCCAAGAG
GAAGATTACAGGCCAGAGTCTTCCACTGCCATGTTTCCGCTTCCACCCATTGAAGAGCTTCCGCGTGC
CAGCAATCCCGCCTCCAGGACCTCCACCTATGATCCTGCATTGCCAAGCACACCATTACTGTCCAGCA
AGCTCTGAACCATCACATCACTCAGTGAAGACAGCCTCCATCGGACTCTAGGAAGGAGCCGGCCTCCT
ATGCCAGTGGTTGTTCCAGTCCCCTGAAGTGCAGGAGACCACAAGGATGTTGGAAGACTCCGAGAGTA
GCTATGAACCAGATGAGCTGACCAAGAGATGGCCACCTGGAAGGACTAATGAAGGACCTAAACGCTAT
CACAACAGCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC230717 representing NM_001172624
 Red=Cloning site Green=Tags(s)

```

MAAERGARRLLSTPSFWLYCLLLLGRRAPGAAAARSGSAPQSPGASIRTFPFYFLVEPVDLTVRGSV
ILNCSAYSESPKIEWKKGDTFLNLVSDRRQLLPDGSFLISNVVHSHKNKPDEGYQCVAVESLGTII
SRTAKLIVAGLPRFTSQPEPSSVYAGNNAILNCEVNADLVFVRWEQNRQPLLLDDRVIKLP SGLMVISN
ATEGDGGLYRCVVEGGPPKYSDLEVELKVLDPDEVIDSLVFLKQPSPLVRVIGQDVVLP CVASGLPTPTI
KWMKNEEALDTESSERL VLLAGGSLEISDVTEDDAGTYFCIADNGETIEAQAE LTVQAQPEFLKQPTNI
YAHESMDIVFECEVTGKPTPTVKWVKNKGMVIPSDYFKIVKEHNLQVLGLVKSDEGFYQCAENDVNAQ
AGAQLIILEHAPATTGPLPSAPRDVVASLVSTRFIKLTWRTPASDPHGDNL TYSVFYTKEGIARERVENT
SHPGEMQVTIQNLMPATVYIFRVMAQNKHSGESSAPLRVETQPEVQLPGPAPNLRAYAASPTSITVWE
TPVSGNGEIQNYKLYMEKGTDKEDQVDVSSH SYTINGLKKYTEYSFRVVAYNKHGPGVSTPDVAVRTL S
DVPSAAPQNL SLEVRNSK SIMIHWQPPAPATQNGQITGYKIRYRKASRKS DVTETLVSGTQLSQLIEGLD
RGTEYNFRVAALTINGTGPATDWLSAETFESDLDETRVPEVPSSLHVRPLVTSIVVSWTPPENQNI VVRG
YAIYGIGSPHAQTIKVDYKQRYTYIENLDPSSHYVITLKA FNNVGEGIPLYESA VTRPHTDTSEVDFV
INAPYTPVPDPTMMPVGVQASILSHDTRITWADNSLPKHQKITDSRY YTVRWKTNIPANTKYKNANA
TTL SYLVTGLKPNLYEF SVMVTGRRSS TWSMTAHGTFELVPTSPPKDVT VVSKEGPKTIIVNWQPP
SEANGKITGYIIYYSTDVNAEIH DWVIEPVVGNRLTHQIQELTLDTPY YFKIQARNSKGMGMSEAVQFR
TPKASGSGGKGSRLPDLGSDYKPPMSGNSPHGSPTSPLDSNMLLVII VSVGVITIVVVVIAVFC TRRT
TSHQKKRAACKSVNGSHKYKGN SKDVKPPDLWIHHERLELKPIDKSPDPNPIMTDTPI PRNSQDITPVD
NSMDSNIHQRRNSYRGHESED SMSTLAGRRGMRPKMMPFDSQPPQPVISAHPIHSLDNPHHHFHSSSLA
SPARSHLYHPGSPWPIGTSM SLD RANSTESVRNTPSTD TMPASSQTCC TDHQDPEGATSSSYLASSQE
EDSGQSLPTAHVRPSHPLKSF AVPAIPPPGPPTYDPALPSTPLLSQ QALNHHIHSVKTASIGTLGRSRPP
MPVVVPSAPEVQETTRMLEDSSESYEPDELTKEMAHLEGLMKDLNAITTA
    
```

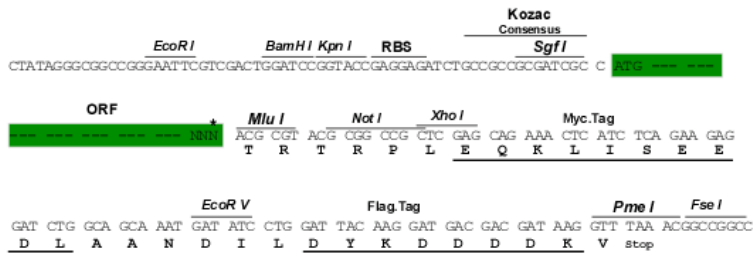
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfi-MluI

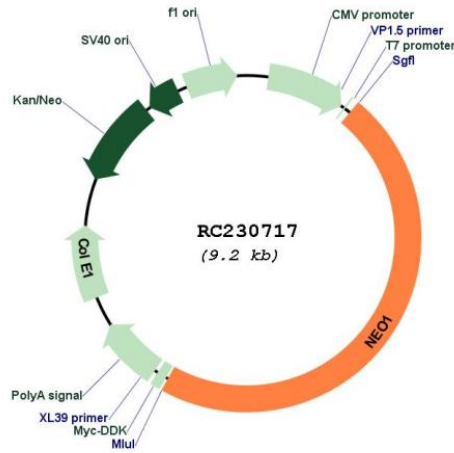
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001172624

ORF Size: 4350 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_001172624.1](#), [NP_001166095.1](#)

RefSeq ORF: 4353 bp

Locus ID: 4756

UniProt ID: [Q92859](#)

Cytogenetics: 15q24.1

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Cell adhesion molecules (CAMs)

MW: 159.3 kDa

Gene Summary: This gene encodes a cell surface protein that is a member of the immunoglobulin superfamily. The encoded protein consists of four N-terminal immunoglobulin-like domains, six fibronectin type III domains, a transmembrane domain and a C-terminal internal domain that shares homology with the tumor suppressor candidate gene DCC. This protein may be involved in cell growth and differentiation and in cell-cell adhesion. Defects in this gene are associated with cell proliferation in certain cancers. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Feb 2010]