

Product datasheet for **RR208934**

DII4 (NM_001107760) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DII4 (NM_001107760) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DII4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RR208934 representing NM_001107760
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGACGCCTGGGTCCCGAGCGCCTGTCGCTGGGCGCTACTGCTGCTGGCGGTCTCTGGCCGACGCGG
 CGGCGGGCTCCGGCATCTCCAGTTGCGGCTGCAGGAGTTCGCCAACGAGCGGGTATGCTGGCCAATGG
 GCGGCCCTGCGAGCCCGGCTGCCGGACTTTCTCCGAATCTGCCTTAAGCATTACCAGGCAACCTTCTCC
 GAGGGACCCTGCACCTTTGGCAATGTCTCCACGCCGATTGGGCACCAACTCCTTCGTCATCAGGGACA
 AGAATAGCGGCAGTGGTCGTAACCTCTCAATTGCCCTCAATTTTACCTGGCCGGAACCTTCTCACT
 CAACATCCAAGCTTGGCACACGCCGGGAGACGACCTGCGGCCAGAGACTTCACCAGGAAATTCATTATC
 AGCCAAATCATCATCAAGGCTCCCTTGCTGTGGTAAGAATTGGAAATCAGATGAGCAAATAACACCC
 TCACAAGACTGCGCTACTTACCAGGTCGTCTGCAGCGACAACACTATGGAGATAGCTGTTCTCGCCT
 GTGCAAGAAGCGGATGACCACTTCGGACATTATGAGTGCCAACCAGATGGCAGCCTGTCCTGCCTGCCG
 GGCTGGACTGGGAAATACTGTGATCAGCCTATATGTCTTTCTGGCTGTATGAGCAGAATGGCTACTGCA
 GCAAGCCAGATGAGTGCAACTGCCGTCCAGTTGGCAGGGCCCTTATGCAATGAATGTATCCCCACAA
 TGGCTGTGTCATGGCACCTGCACCATCCCCTGGCAATGTGCCTGCGATGAGGGCTGGGGAGGTCTGTTT
 TGTGACCAAGATCTAATTACTGCACTCACCCTCTCCGTGCAAGAATGGATCAACTTGCTCCAACAGTG
 GGCCGAGGGGCTATACCTGCACCTGTCTCCAGGCTACACTGGTGGAGCTGTGAGCTGGAACCTCAGCAA
 GTGTGCCAGCAACCCCTGTGCAATGGTGGCAGCTGTAAAGACCATGAGAATAGCTACCCTGCCTGTGT
 CCCCAGGCTACTATGGCCAGCACTGTGAACACAGTACCTTGACCTGTGCGGATTACCCCTGCTTCAATG
 GAGGCTCTGCCGGGAGCGCAACCAGGGGCGAGTTATGCCTGCGAGTGTCCCCTAACCTCACTGGGTC
 CAACTGTGAGAAGAAAGTTGACAGGTGTACCAGCAACCCCTGTGCAATGGAGGTCAAGTGCCTGAACAGA
 GGTCCAAGCCGGACCTGCCGCTGTCGACCTGGATTACAGGCACCCACTGTGAAGTGCACATCAGCGATT
 GTGCCGAAGCCCTTGTGCCATGGGGCACTTGCCACGATCTGGAGAACGGGCTGTGTGCACCTGCC
 TGCTGGCTTTTCTGGCAGGCGCTGCGAGGTGCGGATAACCAACGACGCCTGTGCCCTCAGGACCCCTGCTT
 AATGGGGCACTTGCTACACTGGCCTCTCCCAAACAATTTGTCTGCAACTGTCCTTATGGCTTTGTGG
 GCAGCCGCTGCGAGTTTCCCGTGGGCTTGCCACCCAGCTTCCCCTGGGTAGCTGTCTCCCTGGGTGTGG
 GCTGGTGGTACTGCTGGTGTGCTGGTTCATGGTGGCAGTGGCTGTGCGGCAGCTGCGGCTTCGGAGGCC
 GATGACGACAGCAGGGAAGCCATGAACAATTTGTCAGACTTCCAGAAGGACAACCTAATCCCTGCTGCC
 AGCTCAAGAACACAACCCAGAAGAAGGAGCTGGAAGTGGATTGTGCCTGGACAAGTCCAACCTGTGGCAA
 ACTGCAGAACCACACTGGACTATAATCTGGCCCCAGGATTCCTGGGGCGGGGAGCACGCTGGGAAG
 TATCCTCACAGCGACAAGAGTTTAGGAGAGAAGGTGCCACTTCGGTTACACAGTGAAGCCGGCATGTC
 GAATATCAGCGATATGCTCCCCAGGACTCTATGTACCAGTCAGTATGTTTGATATCAGAAGAGAGGAA
 CGAATGTGTCATTGCCACAGAGGTA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR208934 representing NM_001107760
 Red=Cloning site Green=Tags(s)

MTPGSRSAACRWallllLAVLWPQRAAGSGIFQLRLQEFANERGMLANGRPCEPGCRTFFRICKHYQATFS
 EGPCTFGNVSTPVLGTNSFVIRDKNKSGSRNPLQLPFNFTWPGTFSLNIQAWHTPGDDLREPETSPGNLSI
 SQI I IQGSLAVGKNWKSDEQNNTLTRLRYSYRVVCSDNYYGDCSRLCKKRDDHFHGYECQPDGSL SCLP
 GWTGKYCDQPICLSGCHEQNGYCSKPDECNCRPGWQGPLCNECIPHNGCRHGTCTIPWQCACDEGWGGLF
 CDQDLNYCTHHSPCKNGSTCSNSGPRGYTCTCLPGYTGEHCELELSKASNPCRNGGSKDHENSYHCLC
 PPGYYGQHCEHSTLTCADSPCFNGGSCRERNQGASYACECPPNFTGSNCEKKVDRCTSNPCANGQCLNR
 GPSRTCRCRPGFTGTHCELHISDCARSPCAHGGTCHDLENGPVCTCPAGFSGRRCEVRITNDACASGPCF
 NGATCYTGLSPNNFVNCNCPYGFVGSRCFVPLPSPFPWAVSLGVGLVLLVLLVMVAVAVRQLRLRRP
 DDDREAMNLSDFQKDNLIPAAQLKNTNQKKELEVDCGLDKSNCGKLQNHTLDYNLAPGFLGRGSTPGK
 YPHSDKSLGEKVPLRLHSEKPACRISAI CSPRDSMYQSVCLISEERNECVIATEV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_001107760

ORF Size: 2055 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_001107760.1](#), [NP_001101230.1](#)

RefSeq Size: 3409 bp

RefSeq ORF: 2058 bp

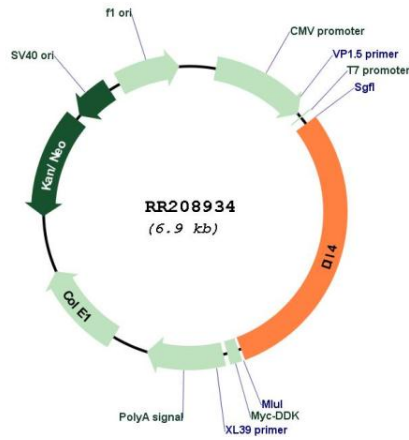
Locus ID: 311332

Cytogenetics: 3q35

MW: 74.8 kDa

Gene Summary: Involved in the Notch signaling pathway as Notch ligand. Activates NOTCH1 and NOTCH4 (PubMed:25700513). Involved in angiogenesis; negatively regulates endothelial cell proliferation and migration and angiogenic sprouting. Essential for retinal progenitor proliferation. Required for suppressing rod fates in late retinal progenitors as well as for proper generation of other retinal cell types. During spinal cord neurogenesis, inhibits V2a interneuron fate (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RR208934