OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC402169

NOTCH3 (NM_000435) Human Mutant ORF Clone

Product data:

Product Type:	Mutant ORF Clones
Product Name:	NOTCH3 (NM_000435) Human Mutant ORF Clone
Mutation Description:	C977S
Affected Codon#:	977
Affected NT#:	2929
Nucleotide Mutation:	NOTCH3 Mutant (C977S), Myc-DDK-tagged ORF clone of Homo sapiens notch 3 (NOTCH3) as transfection-ready DNA
Effect:	CADASIL
Symbol:	NOTCH3
Synonyms:	CADASIL; CADASIL1; CASIL; IMF2; LMNS
E. coli Selection:	Kanamycin (25 ug/mL)
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
Tag:	Myc-DDK
ACCN:	NM_000435
ORF Size:	6963 bp
Restriction Sites:	SgfI-MluI
ORF Nucleotide Sequence:	>RC402169 representing NM_000435 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGGGCCGGGGGCCCGTGGCCGCCGCCGCCGCCGTCGCCCGATGTCGCCGCCACCGCCACCGCCACCCG TGCGGGCGCTGCCCCTGCTGCTGCTGCTAGCGGGGCCGGGGGCTGCAGCCCCCCCTTGCCTGGACGGAAG CCCGTGTGCAAATGGAGGTCGTTGCACCCAGCTGCCCTCCCGGGAGGCTGCCTGCCTGTGCCCGCCTGGC TGGGTGGGTGAGCGGTGTCAGCTGGAGGACCCCTGTCACTCAGGCCCCTGTGCTGGCCGTGGTGTCTGCC AGAGTTCAGTGGTGGCTGGCACCGCCCGATTCTCATGCCGGTGCCCCCGTGGCTTCCGAGGCCCTGACTG CTCCCTGCCAGATCCCTGCCTCAGCAGCCCTTGTGCCCACGGTGCCCGCTGCTCAGTGGGGCCCGATGGA CGCTTCCTCTGCTCCTGCCCACCTGGCTACCAGGGCCGCAGCTGCCGAAGCGACGTGGATGAGTGCCGGG

View online »

TGGGTGAGCCCTGCCGCCATGGTGGCACCTGCCTCAACACACCTGGCTCCTTCCGCTGCCAGTGTCCAGC
TGGCTACACAGGGCCACTATGTGAGAACCCCGCGGTGCCCTGTGCACCCTCACCATGCCGTAACGGGGGC
ACCTGCAGGCAGAGTGGCGACCTCACTTACGACTGTGCCTGTCTTCCTGGGTTTGAGGGTCAGAATTGTG
AAGTGAACGTGGACGACTGTCCAGGACACCGATGTCTCAATGGGGGGACATGCGTGGATGGCGTCAACAC
CTATAACTGCCAGTGCCCTCCTGAGTGGACAGGCCAGTTCTGCACGGAGGACGTGGATGAGTGTCAGCTG
CAGCCCAACGCCTGCCACAATGGGGGTACCTGCTTCAACACGCTGGGTGGCCACAGCTGCGTGTGTGTCA
ATGGCTGGACAGGCGAGAGCTGCAGTCAGAATATCGATGACTGTGCCACAGCCGTGTGCTTCCATGGGGC
CACCTGCCATGACCGCGTGGCTTCTTTCTACTGTGCCTGCCCCATGGGCAAGACTGGCCTCCTGTGTCAC
CTGGATGACGCCTGTGTCAGCAACCCCTGCCACGAGGATGCTATCTGTGACACAAATCCGGTGAACGGCC
GGGCCATTTGCACCTGTCCTCCCGGCTTCACGGGTGGGGCATGTGACCAGGATGTGGACGAGTGCTCTAT
CGGCGCCAACCCCTGCGAGCACTTGGGCAGGTGCGTGAACACGCAGGGCTCCTTCCTGTGCCAGTGCGGT
CGTGGCTACACTGGACCTCGCTGTGAGACCGATGTCAACGAGTGTCTGTCGGGGCCCTGCCGAAACCAGG
CCACGTGCCTCGACCGCATAGGCCAGTTCACCTGTATCTGTATGGCAGGCTTCACAGGAACCTATTGCGA
GGTGGACATTGACGAGTGTCAGAGTAGCCCCTGTGTCAACGGTGGGGTCTGCAAGGACCGAGTCAATGGC
TTCAGCTGCACCTGCCCCTCGGGCTTCAGCGGCTCCACGTGTCAGCTGGACGTGGACGAATGCGCCAGCA
CGCCCTGCAGGAATGGCGCCAAATGCGTGGACCAGCCCGATGGCTACGAGTGCCGCTGTGCCGAGGGCTT
TGAGGGCACGCTGTGTGATCGCAACGTGGACGACTGCTCCCCTGACCCATGCCACCATGGTCGCTGCGTG
GATGGCATCGCCAGCTTCTCATGTGCCTGTGCTCCTGGCTACACGGGCACACGCTGCGAGAGCCAGGTGG
ACGAATGCCGCAGCCAGCCCTGCCGCCATGGCGGCAAATGCCTAGACCTGGTGGACAAGTACCTCTGCCG
CTGCCCTTCTGGGACCACAGGTGTGAACTGCGAAGTGAACATTGACGACTGTGCCAGCAACCCCTGCACC
TTTGGAGTCTGCCGTGATGGCATCAACCGCTACGACTGTGTCTGCCAACCTGGCTTCACAGGGCCCCTTT
GTAACGTGGAGATCAATGAGTGTGCTTCCAGCCCATGCGGCGAGGGAGGTTCCTGTGTGGATGGGGAAAA
TGGCTTCCGCTGCCTCTGCCCGCCTGGCTCCTTGCCCCCACTCTGCCTCCCCCCGAGCCATCCCTGTGCC
CATGAGCCCTGCAGTCACGGCATCTGCTATGATGCACCTGGCGGGTTCCGCTGTGTGTGTGAGCCTGGCT
GGAGTGGCCCCCGCTGCAGCCAGAGCCTGGCCCGAGACGCCTGTGAGTCCCAGCCGTGCAGGGCCGGTGG
GACATGCAGCAGCGATGGAATGGGTTTCCACTGCACCTGCCCGCCTGGTGTCCAGGGACGTCAGTGTGAA
CTCCTCTCCCCCTGCACCCCGAACCCCTGTGAGCATGGGGGCCGCTGCGAGTCTGCCCCTGGCCAGCTGC
CTGTCTGCTCCTGCCCCCAGGGCTGGCAAGGCCCACGATGCCAGCAGGATGTGGACGAGTGTGCTGGCCC
CGCACCCTGTGGCCCTCATGGTATCTGCACCAACCTGGCAGGGAGTTTCAGCTGCACCTGCCATGGAGGG
TACACTGGCCCTTCCTGCGATCAGGACATCAATGACTGTGACCCCAACCCATGCCTGAACGGTGGCTCGT
GCCAAGACGGCGTGGGCTCCTTTTCCTGCTCCTGCCTCCCTGGTTTCGCCGGCCCACGATGCGCCCGCGA
TGTGGATGAGTGCCTGAGCAACCCCTGCGGCCCGGGCACCTGTACCGACCACGTGGCCTCCTTCACCTGC
ACCTGCCCGCCAGGCTACGGAGGCTTCCACTGCGAACAGGACCTGCCCGACTGCAGCCCCAGCTCCTGCT
TCAATGGCGGGACCTGTGTGGACGGCGTGAACTCGTTCAGCTGCCTGTGCCGTCCCGGCTACACAGGAGC
CCACTGCCAACATGAGGCAGACCCCTGCCTCTCGCGGCCCTGCCTACACGGGGGCGTCAGCAGCGCCGCC
CACCCTGGCTTCCGCTGCACCTGCCTCGAGAGCTTCACGGGCCCGCAGTGCCAGACGCTGGTGGATTGGT
GCAGCCGCCAGCCTTGTCAAAACGGGGGTCGCTGCGTCCAGACTGGGGCCTATTGCCTTTGTCCCCCTGG
ATGGAGCGGACGCCTCTGTGACATCCGAAGCTTGCCCTGCAGGGAGGCCGCAGCCCAGATCGGGGTGCGG
CTGGAGCAGCTGTGTCAGGCGGGTGGGCAGTGTGTGGATGAAGACAGCTCCCACTACTGCGTGTGCCCAG
AGGGCCGTACTGGTAGCCACTGTGAGCAGGAGGTGGACCCCTGCTTGGCCCAGCCCTGCCAGCATGGGGG
GACCTGCCGTGGCTATATGGGGGGCTACATGTGTGAGTGTCTTCCTGGCTACAATGGTGATAACTGTGAG
GACGACGTGGACGAGTGTGCCTCCCAGCCCTGCCAGCACGGGGGTTCATGCATTGACCTCGTGGCCCGCT
ATCTCTGCTCCTGTCCCCCAGGAACGCTGGGGGTGCTCTGCGAGATTAATGAGGATGACTGCGGCCCAGG
CCCACCGCTGGACTCAGGGCCCCGGTGCCTACACAATGGCACCTGCGTGGACCTGGTGGGTGGTTTCCGC
TGCACCTGTCCCCCAGGATACACTGGTTTGCGCTGCGAGGCAGACATCAATGAGTGTCGCTCAGGTGCCT
GCCACGCGGCACACACCCGGGACTGCCTGCAGGACCCAGGCGGAGGTTTCCGTTGCCTTTGTCATGCTGG
CTTCTCAGGTCCTCGCTGTCAGACTGTCCTGTCTCCCTGCGAGTCCCAGCCATGCCAGCATGGAGGCCAG
TGCCGTCCTAGCCCGGGTCCTGGGGGTGGGCTGACCTTCACCTGTCACTGTGCCCAGCCGTTCTGGGGTC
CGCGTTGCGAGCGGGTGGCGCGCTCCTGCCGGGAGCTGCAGTGCCCGGTGGGCGTCCCATGCCAGCAGAC
GCCCCGCGGGCCGCGCTGCGCCTGCCCCCCAGGGTTGTCGGGACCCTCCTGCCGCAGCTTCCCGGGGTCG
CCGCCGGGGGCCAGCAACGCCAGCTGCGCGGCCGCCCCCTGTCTCCACGGGGGCTCCTGCCGCCCCGCGC
CGCTCGCGCCCTTCTTCCGCTGCGCTTGCGCGCAGGGCTGGACCGGGCCGCGCTGCGAGGCGCCCGCCGC

GGCACCCGAGGTCTCGGAGGAGCCGCGGTGCCCGCGCGCCGCCTGCCAGGCCAAGCGCGGGGACCAGCGC
TGCGACCGCGAGTGCAACAGCCCAGGCTGCGGCTGGGACGGCGGCGACTGCTCGCTGAGCGTGGGCGACC
CCTGGCGGCAATGCGAGGCGCTGCAGTGCTGGCGCCTCTTCAACAACAGCCGCTGCGACCCCGCCTGCAG
CTCGCCCGCCTGCCTCTACGACAACTTCGACTGCCACGCCGGTGGCCGCGAGCGCACTTGCAACCCGGTG
TACGAGAAGTACTGCGCCGACCACTTTGCCGACGGCCGCTGCGACCAGGGCTGCAACACGGAGGAGTGCG
GCTGGGATGGGCTGGATTGTGCCAGCGAGGTGCCGGCCCTGCTGGCCCGCGGCGTGCTGGTGCTCACAGT
GCTGCTGCCGCCAGAGGAGCTACTGCGTTCCAGCGCCGACTTTCTGCAGCGGCTCAGCGCCATCCTGCGC
ACCTCGCTGCGCTTCCGCCTGGACGCGCACGGCCAGGCCATGGTCTTCCCTTACCACCGGCCTAGTCCTG
GCTCCGAACCCCGGGCCCGTCGGGAGCTGGCCCCCGAGGTGATCGGCTCGGTAGTAATGCTGGAGATTGA
CAACCGGCTCTGCCTGCAGTCGCCTGAGAATGATCACTGCTTCCCCGATGCCCAGAGCGCCGCTGACTAC
CTGGGAGCGTTGTCAGCGGTGGAGCGCCTGGACTTCCCGTACCCACTGCGGGACGTGCGGGGGGAGCCGC
TGGAGCCTCCAGAACCCAGCGTCCCGCTGCTGCCACTGCTAGTGGCGGGCGCTGTCTTGCTGCTGGTCAT
TCTCGTCCTGGGTGTCATGGTGGCCCGGCGCAAGCGCGAGCACAGCACCCTCTGGTTCCCTGAGGGCTTC
TCACTGCACAAGGACGTGGCCTCTGGTCACAAGGGCCGGCGGGAACCCGTGGGCCAGGACGCGCTGGGCA
TGAAGAACATGGCCAAGGGTGAGAGCCTGATGGGGGAGGTGGCCACAGACTGGATGGACACAGAGTGCCC
AGAGGCCAAGCGGCTAAAGGTAGAGGAGCCAGGCATGGGGGCTGAGGAGGCTGTGGATTGCCGTCAGTGG
ACTCAACACCATCTGGTTGCTGCTGACATCCGCGTGGCACCAGCCATGGCACTGACACCACCACAGGGCG
ACGCAGATGCTGATGGCATGGATGTCAATGTGCGTGGCCCAGATGGCTTCACCCCGCTAATGCTGGCTTC
CTTCTGTGGGGGGGCTCTGGAGCCAATGCCAACTGAAGAGGATGAGGCAGATGACACATCAGCTAGCATC
ATCTCCGACCTGATCTGCCAGGGGGCTCAGCTTGGGGCACGGACTGACCGTACTGGCGAGACTGCTTTGC
ACCTGGCTGCCCGTTATGCCCGTGCTGATGCAGCCAAGCGGCTGCTGGATGCTGGGGCAGACACCAATGC
CCAGGACCACTCAGGCCGCACTCCCCTGCACACAGCTGTCACAGCCGATGCCCAGGGTGTCTTCCAGATT
CTCATCCGAAACCGCTCTACAGACTTGGATGCCCGCATGGCAGATGGCTCAACGGCACTGATCCTGGCGG
CCCGCCTGGCAGTAGAGGGCATGGTGGAAGAGCTCATCGCCAGCCATGCTGATGTCAATGCTGTGGATGA
GCTTGGGAAATCAGCCTTACACTGGGCTGCGGCTGTGAACAACGTGGAAGCCACTTTGGCCCTGCTCAAA
AATGGAGCCAATAAGGACATGCAGGATAGCAAGGAGGAGACCCCCCTATTCCTGGCCGCCCGCGAGGGCA
GCTATGAGGCTGCCAAGCTGCTGTTGGACCACTTTGCCAACCGTGAGATCACCGACCACCTGGACAGGCT
GCCGCGGGACGTAGCCCAGGAGAGACTGCACCAGGACATCGTGCGCTTGCTGGATCAACCCAGTGGGCCC
CGCAGCCCCCCCGGTCCCCACGGCCTGGGGCCTCTGCTCTGTCCTCCAGGGGCCTTCCTCCCTGGCCTCA
AAGCGGCACAGTCGGGGTCCAAGAAGAGCAGGAGGCCCCCCGGGAAGGCGGGGCTGGGGCCGCAGGGGCC
CCGGGGGCGGGGCAAGAAGCTGACGCTGGCCTGCCCGGGCCCCCTGGCTGACAGCTCGGTCACGCTGTCG
CCCGTGGACTCGCTGGACTCCCCGCGGCCTTTCGGTGGGCCCCCTGCTTCCCCTGGTGGCTTCCCCCTTG
AGGGGCCCTATGCAGCTGCCACTGCCACTGCAGTGTCTCTGGCACAGCTTGGTGGCCCAGGCCGGGCGGG
TCTAGGGCGCCAGCCCCCTGGAGGATGTGTACTCAGCCTGGGCCTGCTGAACCCTGTGGCTGTGCCCCTC
GATTGGGCCCGGCTGCCCCCACCTGCCCCTCCAGGCCCCTCGTTCCTGCTGCCACTGGCGCCGGGACCCC
AGCTGCTCAACCCAGGGACCCCCGTCTCCCCGCAGGAGCGGCCCCCGCCTTACCTGGCAGTCCCAGGACA
TGGCGAGGAGTACCCGGCGGCTGGGGCACACAGCAGCCCCCCAAAGGCCCGCTTCCTGCGGGTTCCCAGT
GAGCACCCTTACCTGACCCCATCCCCCGAATCCCCTGAGCACTGGGCCAGCCCCTCACCTCCCTCCCTCT
CAGACTGGTCCGAATCCACGCCTAGCCCAGCCACTGCCACTGGGGCCATGGCCACCACCACTGGGGCACT
GCCTGCCCAGCCACTTCCCTTGTCTGTTCCCAGCTCCCTTGCTCAGGCCCAGACCCAGCTGGGGCCCCAG
CCGGAAGTTACCCCCAAGAGGCAAGTGTTGGCC

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGA TAAGGTTTAA

Protein Sequence:

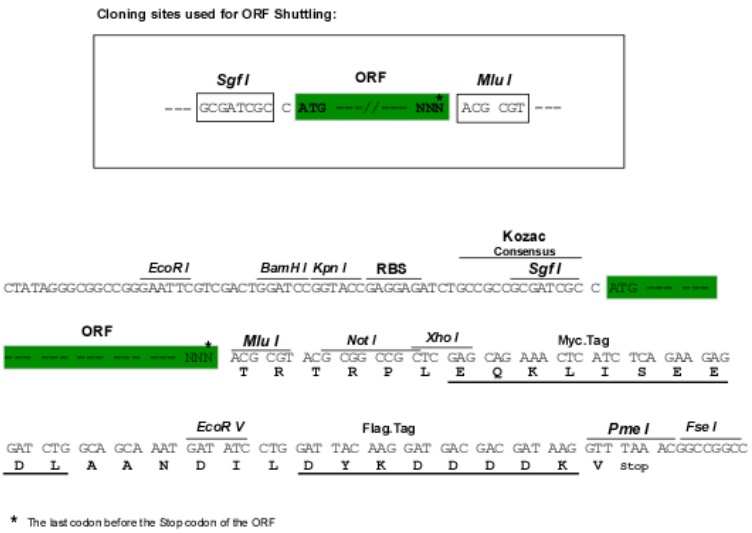
>RC402169 representing NM_000435
Red=Cloning site Green=Tags(s)

MGPGARGRRRRRPMSPPPPPPPVRALPLLLLLAGPGAAAPPCLDGSPCANGGRCTQLPSREAACLCPPG
WVGERCQLEDPCHSGPCAGRGVCQSSVVAGTARFSCRCPRGFRGPDCSLPDPCLSSPCAHGARCSVGPDG
RFLCSCPPGYQGRSCRSDVDECRVGEPCRHGGTCLNTPGSFRCQCPAGYTGPLCENPAVPCAPSPCRNGG
TCRQSGDLTYDCACLPGFEGQNCEVNVDDCPGHRCLNGGTCVDGVNTYNCQCPPEWTGQFCTEDVDECQL
QPNACHNGGTCFNTLGGHSCVCVNGWTGESCSQNIDDCATAVCFHGATCHDRVASFYCACPMGKTGLLCH
LDDACVSNPCHEDAICDTNPVNGRAICTCPPGFTGGACDQDVDECSIGANPCEHLGRCVNTQGSFLCQCG
RGYTGPRCETDVNECLSGPCRNQATCLDRIGQFTCICMAGFTGTYCEVDIDECQSSPCVNGGVCKDRVNG
FSCTCPSGFSGSTCQLDVDECASTPCRNGAKCVDQPDGYECRCAEGFEGTLCDRNVDDCSPDPCHHGRCV
DGIASFSCACAPGYTGTRCESQVDECRSQPCRHGGKCLDLVDKYLCRCPSGTTGVNCEVNIDDCASNPCT
FGVCRDGINRYDCVCQPGFTGPLCNVEINECASSPCGEGGSCVDGENGFRCLCPPGSLPPLCLPPSHPCA
HEPCSHGICYDAPGGFRCVCEPGWSGPRCSQSLARDACESQPCRAGGTCSSDGMGFHCTCPPGVQGRQCE
LLSPCTPNPCEHGGRCESAPGQLPVCSCPQGWQGPRCQQDVDECAGPAPCGPHGICTNLAGSFSCTCHGG
YTGPSCDQDINDCDPNPCLNGGSCQDGVGSFSCSCLPGFAGPRCARDVDECLSNPCGPGTCTDHVASFTC
TCPPGYGGFHCEQDLPDCSPSSCFNGGTCVDGVNSFSCLCRPGYTGAHCQHEADPCLSRPCLHGGVSSAA
HPGFRCTCLESFTGPQCQTLVDWCSRQPCQNGGRCVQTGAYCLCPPGWSGRLCDIRSLPCREAAAQIGVR
LEQLCQAGGQCVDEDSSHYCVCPEGRTGSHCEQEVDPCLAQPCQHGGTCRGYMGGYMCECLPGYNGDNCE
DDVDECASQPCQHGGSCIDLVARYLCSCPPGTLGVLCEINEDDCGPGPPLDSGPRCLHNGTCVDLVGGFR
CTCPPGYTGLRCEADINECRSGACHAAHTRDCLQDPGGGFRCLCHAGFSGPRCQTVLSPCESQPCQHGGQ
CRPSPGPGGGLTFTCHCAQPFWGPRCERVARSCRELQCPVGVPCQQTPRGPRCACPPGLSGPSCRSFPGS
PPGASNASCAAAPCLHGGSCRPAPLAPFFRCACAQGWTGPRCEAPAAAPEVSEEPRCPRAACQAKRGDQR
CDRECNSPGCGWDGGDCSLSVGDPWRQCEALQCWRLFNNSRCDPACSSPACLYDNFDCHAGGRERTCNPV
YEKYCADHFADGRCDQGCNTEECGWDGLDCASEVPALLARGVLVLTVLLPPEELLRSSADFLQRLSAILR
TSLRFRLDAHGQAMVFPYHRPSPGSEPRARRELAPEVIGSVVMLEIDNRLCLQSPENDHCFPDAQSAADY
LGALSAVERLDFPYPLRDVRGEPLEPPEPSVPLLPLLVAGAVLLLVILVLGVMVARRKREHSTLWFPEGF
SLHKDVASGHKGRREPVGQDALGMKNMAKGESLMGEVATDWMDTECPEAKRLKVEEPGMGAEEAVDCRQW
TQHHLVAADIRVAPAMALTPPQGDADADGMDVNVRGPDGFTPLMLASFCGGALEPMPTEEDEADDTSASI
ISDLICQGAQLGARTDRTGETALHLAARYARADAAKRLLDAGADTNAQDHSGRTPLHTAVTADAQGVFQI
LIRNRSTDLDARMADGSTALILAARLAVEGMVEELIASHADVNAVDELGKSALHWAAAVNNVEATLALLK
NGANKDMQDSKEETPLFLAAREGSYEAAKLLLDHFANREITDHLDRLPRDVAQERLHQDIVRLLDQPSGP
RSPPGPHGLGPLLCPPGAFLPGLKAAQSGSKKSRRPPGKAGLGPQGPRGRGKKLTLACPGPLADSSVTLS
PVDSLDSPRPFGGPPASPGGFPLEGPYAAATATAVSLAQLGGPGRAGLGRQPPGGCVLSLGLLNPVAVPL
DWARLPPPAPPGPSFLLPLAPGPQLLNPGTPVSPQERPPPYLAVPGHGEEYPAAGAHSSPPKARFLRVPS
EHPYLTPSPESPEHWASPSPPSLSDWSESTPSPATATGAMATTTGALPAQPLPLSVPSSLAQAQTQLGPQ
PEVTPKRQVLA

SGPTRTRRLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



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).

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NP_000426

RefSeq Size: 6963 bp

RefSeq ORF: 6966 bp

Locus ID: 4854

Cytogenetics: 19p13.12

Domains: NL, EGF_CA, ANK, EGF, EGF

Protein Families:	Druggable Genome
Protein Pathways:	Dorso-ventral axis formation, Notch signaling pathway
MW:	255.3 kDa
Gene Summary:	This gene encodes the third discovered human homologue of the Drosophilia melanogaster type I membrane protein notch. In Drosophilia, notch interaction with its cell-bound ligands (delta, serrate) establishes an intercellular signalling pathway that plays a key role in neural development. Homologues of the notch-ligands have also been identified in human, but precise interactions between these ligands and the human notch homologues remains to be determined. Mutations in NOTCH3 have been identified as the underlying cause of cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy (CADASIL). [provided by RefSeq, Jul 2008]