

Product datasheet for **RC226001**

Neurofibromin (NF1) (NM_001128147) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Neurofibromin (NF1) (NM_001128147) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Neurofibromin
Synonyms:	NFNS; VRNF; WSS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC226001 representing NM_001128147
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCCGCGCACAGGCCGGTGGAAATGGGTCCAGGCCGTGGTCCAGCCGCTTCGACGAGCAGCTTCCAATAA
 AAACAGGACAGCAGAACACACATACCAAAGTCAGTACTGAGCACAAACAAGGAATGCTAATCAATATTTT
 CAAATACAAGTTTTCTTTGGTTATAAGCGGCCTCACTACTATTTTAAAGAATGTTAAACAATATGAGAATA
 TTTGGAGAAGCTGCTGAAAAAATTTATATCTCTCTCAGTTGATTATATTGGATACACTGAAAAATGTC
 TTGCTGGCAACCAAAGGACACAATGAGATTAGATGAAACGATGCTGGTCAAACAGTTGCTGCCAGAAAT
 CTGCCATTTTCTCACACCTGTCGTGAAGGAAACCAGCATGCAGCTGAACCTCGGAATTCGCTCTGGG
 GTTTTATTTTCTCAGCTGCAACAACCTCAATGCAGTCTTATGTCGATTTCTACCAGTTACAGGAAT
 TAACTGTTTGTTCAGAAGACAATGTTGATGTTTCATGATATAGAATTGTTACAGTATATCAATGTGGATTG
 TGCAAAATTAACGACTCCTGAAGGAAACAGCATTTAAATTTAAAGCCCTAAAGAAGTTGCCGAGTTA
 GCAGTTATAAATAGCCTGAAAAAGGCATTTTGGAACTGGGTAGAAAAATTATCCAGATGAATTTACAAAAC
 TGTACCAGATCCACAGACTGATATGGCTGAATGTGCAGAAAAGCTATTTGACTTGGTGGATGGTTTTGC
 TGAAAGCACAAACGTAAGCAGCAGTTTGGCCACTACAATCATTCTCCTTATCTTGTGTCCAGAAATA
 ATCCAGGATATATCCAAAGACGTGGTTGATGAAAAACAATGAATAAGAAGTTATTTCTGGACAGCTAC
 GAAAAGCTCTTGTGGCCATGGAGGAAGTAGGCAGCTGACAGAAAAGTGTGCAATTGCCTGTGTCAAAC
 GTGTAAGCAAGTACTTACATCAATTGGGAAGTAACTCTGTCAATTTCTACTTGTTCAGTCCATGGTG
 GTTATGATTAAGAACCTGCTTTTAAATCCAAGTAAAGCCATTCTCAAGAGGCAGTCAGCCTGCAGATGTGG
 ATCTAATGATTGACTGCTTTTCTTGTCTTCTGATAAGCCCTCACAAACAACCAACTTTAAGATCTG
 CCTGGCTCAGAATTCACCTTCTACATTTCACTATGCTGGTAAATTCCTCCATCGAATCATACCAAT
 TCCGCATTGGATTGGTGGCCTAAGATTGATGCTGTGATTGTCACTCGGTTGAACTTCGAAATATGTTTG
 GTGAAACACTTCAATAAGCAGTGAAGTTGTGGAGCACACCCAGCAATACGAATGGCACCAGTCTTAC
 ATTTAAAGAAAAAGTAACAAGCCTTAAATTTAAAGAAAAACCTACAGACCTGGAGACAAGAAGCTATAAG
 TATCTTCTTGTCCATGGTAAACTAATTCATGCAGATCCAAAGCTCTTGTGTTGTAATCCAAGAAAAAC
 AGGGGCCCGAAACCAAGGCAGTACAGCAGAATTAATTACAGGGCTCGTCCAACCTGGTCCCTCAGTCACA
 CATGCCAGAGATTGCTCAGGAAGCAATGGAGGCTCTGCTGGTTCTTTCATCAGTTAGATAGCATTGATTTG
 TGAATCCTGATGCTCCTGTAGAAACATTTTGGGAGATTAGGTATATGTACTTTTATTTTTAAATTCAA
 CTTTTAAATTTATTTTGTATTTTGTCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC226001 representing NM_001128147
 Red=Cloning site Green=Tags(s)

MAAHRPVEWVQAVVSRFDEQLPIKGTQQNTHTKVSTEHNKECLINISKYKFLVISGLTTILKNVNMRI
 FGEAAEKNLYLSQLIILDLEKLAGQPKDMRLDEMLVKQLLPEICHFLHTCREGNQHAELRNSASG
 VLFSLSCNNFNAVFSRISTRLELTVCSSEDNVDVHDIELLQYINVDCAKLKRLKETAFAFKALKKVAQL
 AVINSLEKAFWNWVNYPDEFTKLYQIPQDMAECAEKLFDLVDGFAESTKRKAAVWPLQIILLILCPEI
 IQDISKDVVDENNMNKKLFLDSLKALAGHGGSRQLTESAAIACVKLCKASTYINWEDNSVIFLLVQSMV
 VDLKNLLFNPSKPF SRGSQPADVDLMIDCLVSCFRISPHNNQHFKICLAQNSPSTFHVYLVNSLHRIITN
 SALDWWPKIDAVYCHSVELRNMFGETLHKAVQCGGAHPAIRMASLTFKKVTSLKFKKPTDLETRSYK
 YLLL SMVKLIHADPKLLLCNPRKQGPETQGSTAELITGLVQLVPQSHMPEIAQEAMEALLVLHQLDSIDL
 WNPDPVETFWEIFRYMYFYFLNSTFKFYFVFLS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8068_h04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001128147

ORF Size: 1779 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_001128147.3](#)

RefSeq ORF: 1782 bp

Locus ID: 4763

UniProt ID: [P21359](#)

Cytogenetics: 17q11.2

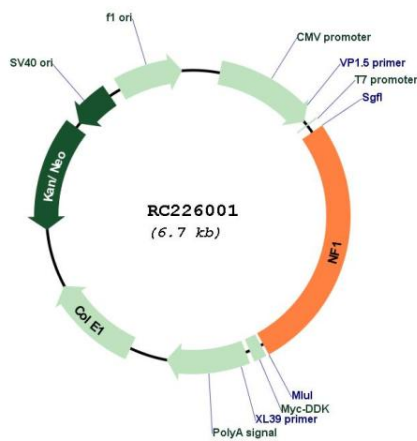
Protein Families: Druggable Genome

Protein Pathways: MAPK signaling pathway

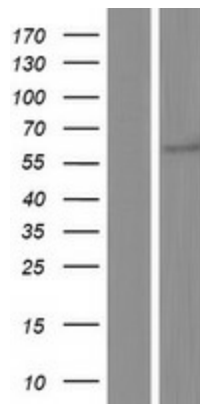
MW: 67.4 kDa

Gene Summary: This gene product appears to function as a negative regulator of the ras signal transduction pathway. Mutations in this gene have been linked to neurofibromatosis type 1, juvenile myelomonocytic leukemia and Watson syndrome. The mRNA for this gene is subject to RNA editing (CGA>UGA->Arg1306Term) resulting in premature translation termination. Alternatively spliced transcript variants encoding different isoforms have also been described for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC226001



Western blot validation of overexpression lysate (Cat# [LY426897]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC226001 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).