

Product datasheet for **RC224631**

RFNG (NM_002917) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RFNG (NM_002917) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RFNG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC224631 representing NM_002917 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCC**CGATCGCC**

ATGAGCCGCGCGCTGGGGCGCTGTGCCGGCCTGCCTCGCGCTGGCCGCGGCCCTGGCCGCGCTGCTGT
TACTGCCGCTGCCGCTGCCCCGCGCGCCCGCCCGGCCGACCCCGCCCGGCCCGCGCGGCCCGCC
GTCCCGGCCGCTGCCCCAGCCTGCGGCCTGACGACGTCTTCATCGCCGTAAGACCACCGGAAGAAC
CACGGGCCGCGCTGCGGCTGCTGCTGCGCACCTGGATCTCCCGGCCCGCCAGCAGACGTTTATCTTCA
CCGACGGGACGACCCCTGAGCTCGAGCTCCAGGGCGGCACCGTGTATCAACACCACTGCTCGGCGGT
GCGCACTCGTCAGGCCCTCTGCTGCAAGATGTCGGTGGAGTATGACAAGTTCATTGAGTCCGGGCGCAAG
TGGTTTTGCCACGTGGATGATGACAATTATGTGAACGCCAGGAGCCTCCTGCACCTGCTCTCCAGCTTCT
CACCCAGCCAGGACGTCTACCTGGGGCGGCCAGCCTGGACCACCCATTGAGGCCACCGAGAGGGTCCA
GGGTGGCAGAAGTGTACCACGGTCAAGTTCTGGTTTGTACTGGTGGGCGGGTTCTGCCTCAGCAGA
GGCCTTGCCCTCAAGATGAGCCCATGGGCCAGCCTGGGCAGTTCATGAGCACAGCTGAGCAGGTGCGGC
TGCCGGATGACTGCACAGTTGGTACATCGTGGAGGGCTCCTGGGCGCCGCTGCTGCACAGCCCTCT
CTTCCACTCTCACCTGGAGAACCTGCAGAGGCTGCCGCCGACACCTGCTCCAGCAGGTTACCTTGAGC
CATGGGGTCTGAGAACCACATAACGTGGTGAACGTGGCTGGAGGCTTCAGCCTGCATCAAGACCCCA
CACGGTTAAGTCTATCCATTGTCTTGTACCCAGACACGGACTGGTGTCCAGGCAGAAACAGGGCGC
CCCGACCTCTCGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC224631 representing NM_002917
Red=Cloning site Green=Tags(s)

MSRARGALCRACLALAAALAALLLPLPLPRAPAPARTPAPAPRAPPSPRAAPSLRPDDVFI AVKTTTRKN
 HGPRLRLLLRTWISRARQQTFFITDGGDPELELQGGDRVINTNCSAVRTRQALCKKMSVEYDKFIESGRK
 WFCHVDDDDNYVNARSLHLLSSFSPSQDVYLGRPSLDHPIEATERVQGGRTVTTVKFWFATGGAGFCLSR
 GLALKMSPWASLGSFMSTAEQVRLPDDCTVGYIVEGLLGARLLHSPLFHSHLENLQRLPPDTLLQQVTLN
 HGGPENPHNVVNVAGGFSLHQDPTRFKSIHCLLYPDTDWCPRQKQGAPTSR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8121_c01.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_002917

ORF Size: 993 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_002917.2](#)

RefSeq Size: 1828 bp

RefSeq ORF: 996 bp

Locus ID: 5986

UniProt ID: [Q9Y644](#)

Cytogenetics: 17q25.3

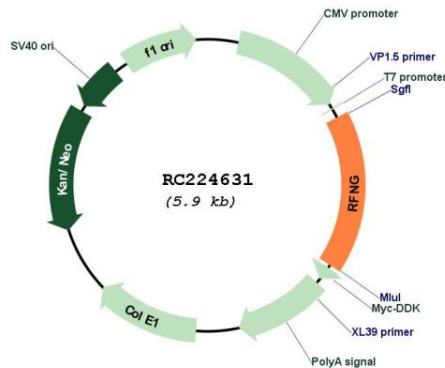
Protein Families: Transmembrane

Protein Pathways: Notch signaling pathway

MW: 36.9 kDa

Gene Summary: Glycosyltransferase that initiates the elongation of O-linked fucose residues attached to EGF-like repeats in the extracellular domain of Notch molecules. Modulates NOTCH1 activity by modifying O-fucose residues at specific EGF-like domains resulting in enhancement of NOTCH1 activation by DLL1 and JAG1. May be involved in limb formation and in neurogenesis.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC224631