

Product datasheet for **RG224631**

RFNG (NM_002917) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
 Product Name: RFNG (NM_002917) Human Tagged ORF Clone
 Tag: TurboGFP
 Symbol: RFNG
 Mammalian Cell Selection: Neomycin
 Vector: pCMV6-AC-GFP (PS100010)
 E. coli Selection: Ampicillin (100 ug/mL)
 ORF Nucleotide Sequence: >RG224631 representing NM_002917
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAGCCGCGCGCTGGGGCGCTGTGCCGGCCTGCCTCGCGCTGGCCGCGGCCCTGGCCGCGCTGCTGT
 TACTGCCGCTGCCGCTGCCCCGCGCGCCCGCCCGGCCCGGACCCCGCCCGGCCCGCGCGGCCCC
 GTCCCGGCCCGCTGCCCCAGCCTGCGGCCTGACGACGTCTTCATCGCCGTCAGACCACCCGGAAGAAC
 CACGGGCCGCGCCTGCGGCTGCTGCTGCGCACCTGGATCTCCCGGCCCGCCAGCAGACGTTTATCTTCA
 CCGACGGGACGACCCCTGAGCTCGAGCTCCAGGGCGGCACCGTGTCAACACCAACTGCTCGGCGGT
 GCGCACTCGTCAGGCCCTCTGCTGCAAGATGTCGGTGGAGTATGACAAGTTCATTGAGTCCGGGCGCAAG
 TGGTTTTGCCACGTGGATGATGACAATTATGTGAACGCAAGGAGCCTCCTGCACCTGCTCTCCAGCTTCT
 CACCCAGCCAGGACGTCTACCTGGGGCGGCCAGCCTGGACCACCCATTGAGGCCACCGAGAGGGTCCA
 GGGTGGCAGAAGTGTACCACGGTCAAGTTCTGGTTTGTACTGGTGGGCGGGTTCTGCCTCAGCAGA
 GGCCTTGCCTCAAGATGAGCCCATGGCCAGCCTGGGCAGTTCATGAGCACAGCTGAGCAGGTGCGGC
 TGCCGGATGACTGCACAGTTGGTACATCGTGGAGGGCTCCTGGGCGCCCGCTGCTGCACAGCCCT
 CTTCCACTCTCACCTGGAGAACCTGCAGAGGCTGCCGCCGACACCTGCTCCAGCAGGTTACCTTGAGC
 CATGGGGTCTGAGAACCACAGAACGTGGTGAACGTGGCTGGAGGCTTCAGCCTGCATCAAGACCCCA
 CACGGTTTAAGTCTATCCATTGTCTTGTACCCAGACACGGACTGGTGTCCAGGCAGAAACAGGGCGC
 CCCGACCTCTCGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence: >RG224631 representing NM_002917
 Red=Cloning site Green=Tags(s)

MSRARGALCRACLALAAALAALLLPLPLPRAPAPARTPAPAPRAPPSPRAAPSLRPDDVFIIVKTTTRKN
 HGPRLRLLLRTWISRARQQTFIFTDGDDPELELQGGDRVINTNCSAVRTRQALCCKMSVEYDKFIESGRK
 WFCHVDDDDNYVNARSLHLLSSFSPSQDVYLGRPSLDHPTEATERVQGGRTVTTVKFWFATGGAGFCLSR
 GLALKMSPWASLGSFMSTAEQVRLPDDCTVGYIVEGLLGARLLHSPLFHSLENLQRLPPDTLLQQVTLN
 HGGPENPQNVVNVAGGFSLHQDPTRFKSIHCLLYPDTDWCPRQKQGAPTSR

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



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_002917.1](#), [NP_002908.1](#)

RefSeq Size: 1828 bp

RefSeq ORF: 996 bp

Locus ID: 5986

UniProt ID: [Q9Y644](#)

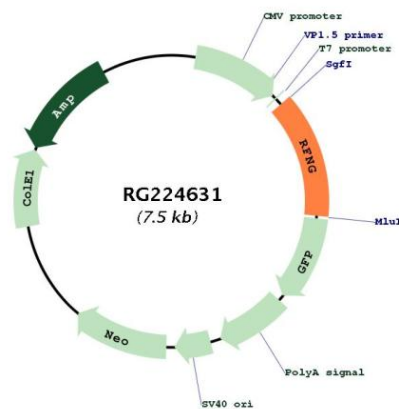
Cytogenetics: 17q25.3

Protein Families: Transmembrane

Protein Pathways: Notch signaling pathway

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 RG224631