

Product datasheet for **RG211955**

Manic Fringe (MFNG) (NM_002405) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Manic Fringe (MFNG) (NM_002405) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Manic Fringe
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG211955 representing NM_002405 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCAGTGCCGGCTCCCGGGGGCTGGCTGGAGCCCTCCTCACCTCCTGTGCATGGGGCTCCTGTGTC
TGCGGTACCACTGAACCTGTCCCGCAGCGGGTACAAGGGACCCCGAGCTGAGCCAGCCGAACCCGGG
GCCCCTAAGCTACAGCTACACGATGTCTTCATTGCAGTGAAGACGACCCGGGCTTCCACCGCTTGCGC
CTGGAGCTGCTGCTTACACGTGGGTTCCAGGACCAGGAACAGACATTTGTCTTCACCGACAGCCGAC
ACAAAGGCCTCCAGGAGAGACTGGGGTCCACCTTGTTGGTCACTGCTCCGCGAACACAGCCACCC
AGCTCTGTCTGCAAGATGGCTGCTGAGTTCGACACCTTCTTGCCAGTGGGCTTAGGTGTTCTGCCAT
GTGGACGATGACAACTATGTGAACCAAGGGCGCTGCTGCAGCTTCTGAGAGCCTTCCCGCTGGCCCGG
ACGTCTATGTGGGAAGGCCAGCCTGAACCGGCCATCCATGCCTCAGAGCCACAGCCCCACAACCGCAC
GAGGCTGGTACAGTTCTGGTTTGGCACTGGGGTCTGGCTTCTGCATCAATCGCAAAGTGGCTTTGAAG
ATGGCTCCGTGGCCAGTGGCTCCCGTTTCATGGACACATCTGCTCTCATCCGGCTGCCTGATGACTGCA
CCATGGGCTATATCATTGAGTGAAGCTGGGCGGCCCTGCAGCCAGCCCCCTTTTCACTCCCACCT
GGAGACCCTGCAGCTGCTGAGGACTGCACAGCTCCAGAACAGGTACCCTCAGCTACGGTGTCTTTGAG
GGAAACTCAACGTCATTAAGCTACAGGGCCCCCTTCTCCCGGAGGAGACCCCTCCAGATTTGCTCCC
TCCATTGTCTGCTCTATCCAGATACACCCTGGTGTCCCGAGCTGGGTGCCGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG211955 representing NM_002405
 Red=Cloning site Green=Tags(s)

MQCRLPRGLAGALLTLLCMGLLCLRYHLNLSQQRVQGTPELSQPNPGPPKLQLHDVFIQVKTTRAFHRLR
 LELLDDTWVSRTREQTFVFTDSPDKGLQERLGSHLVVTNCSAEHSHPALSCKMAAEFDTFLASGLRWFC
 VDDDNVYNPRALLQLLRAFLARDVYVGRPSLNRPVHASEPQPHNRTRLVQWFATGGAGFCINRKLALK
 MAPWASGSRFMDTSALIRLPDDCTMGYIEECKLGGRLQPSPLFHSHLETLQLLRTAQLPEQVTLVSYGVFE
 GKLNVIKLGQPFSPPEEDPSRFRSLHCLLYPDTWPWCPQLGAR

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002405

ORF Size: 963 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_002405.4](#)

RefSeq Size: 2040 bp

RefSeq ORF: 966 bp

Locus ID: 4242

UniProt ID: [O00587](#)

Cytogenetics: 22q13.1

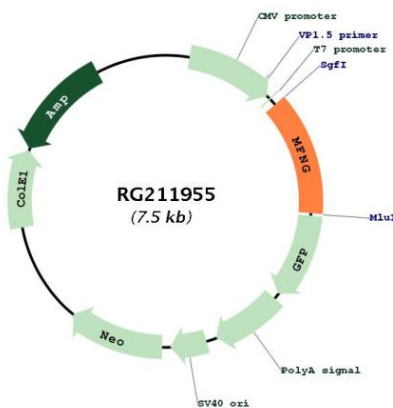
Domains: Fringe

Protein Families: Druggable Genome

Protein Pathways: Notch signaling pathway

Gene Summary: This gene is a member of the glycosyltransferase 31 gene family. Members of this gene family, which also includes the LFNG (GeneID: 3955) and RFNG (GeneID: 5986) genes, encode evolutionarily conserved glycosyltransferases that act in the Notch signaling pathway to define boundaries during embryonic development. While their genomic structure is distinct from other glycosyltransferases, these proteins have a fucose-specific beta-1,3-N-acetylglucosaminyltransferase activity that leads to elongation of O-linked fucose residues on Notch, which alters Notch signaling. The protein encoded by this gene may control Notch signaling in claudin-low breast cancer. [provided by RefSeq, May 2018]

Product images:



Circular map for RG211955