

Product datasheet for **SC328498**

Manic Fringe (MFNG) (NM_001166343) Human Untagged Clone

Product data:

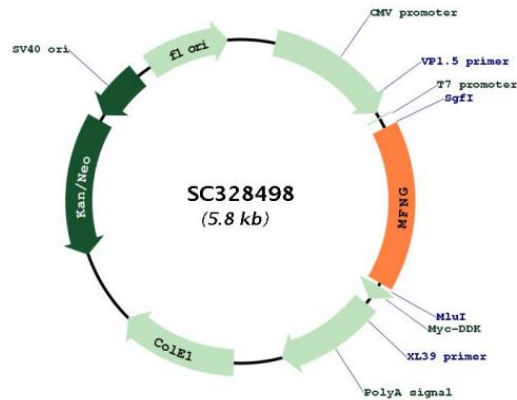
Product Type:	Expression Plasmids
Product Name:	Manic Fringe (MFNG) (NM_001166343) Human Untagged Clone
Tag:	Tag Free
Symbol:	MFNG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC328498 representing NM_001166343. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCAGTGCCGGCTCCCGGGGCTGGCTGGAGCCCTCCTCACCTCCTGTGCATGGGGCTCCTGTGT
CTGCGGTACCACTTGAACCTGTCCCGCAGCGGGTACAAGGGACCCCGAGCTGAGCCAGCCGAACCCG
GGGCCCTAAGCTACAGCTACACGATGTCTTCATTGCAGTGAAGACGACCCGGGCTTCCACCGCTTG
CGCCTGGAGCTGCTGCTTGACACGTGGGTTTCCAGGACCAGGGAACAGGTGACAAGTCCCACCTTGTG
GTCACCAACTGCTCCGCGAACACAGCCACCCAGCTCTGTCTGCAAGATGGCTGCTGAGTTCGACACC
TTCTTGGCCAGTGGGCTTAGGTGGTTCTGCCATGTGGACGATGACAACCTATGTGAACCAAGGGCGCTG
CTGCAGTCTGAGAGCCTTCCCGCTGGCCCGCAGCTCTATGTGGGAAGGCCAGCCTGAACCGGCC
ATCCATGCCTCAGAGCCACAGCCCAACCGCAGAGGCTGGTACAGTTCTGGTTTGCCACTGGGGGT
GCTGGCTTCTGCATCAATCGAACTGGCTTGAAGATGGCTCCGTGGCCAGTGGCTCCCGTTTCATG
GACACATCTGCTCTCATCCGGCTGCCTGATGACTGCACCATGGGCTATATCATTGAGTGAAGCTGGGC
GGCCGCTGCAGCCAGCCCTCTTCACTCCACCTGGAGACCCTGCAGCTGCTGAGGACTGCACAG
CTCCAGAACAGGTCACCCTCAGCTACGGTGTCTTTGAGGGAACTCAACGTCAATTAAGCTACAGGGC
CCCTTCTCCCGGAGGAGACCCTCCAGATTTGCTCCCTCCATTGTCTGCTCTATCCAGATACCC
TGGTGTCCCGAGCTGGTGCCCGATGA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGCGC
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Restriction Sites: Sgfl-Mlul



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Plasmid Map:


ACCN: NM_001166343

Insert Size: 924 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001166343.1](#)

RefSeq Size: 2034 bp

RefSeq ORF:	924 bp
Locus ID:	4242
UniProt ID:	<u>O00587</u>
Cytogenetics:	22q13.1
Protein Families:	Druggable Genome
Protein Pathways:	Notch signaling pathway
MW:	34.7 kDa

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]

Transcript Variant: This variant (2) uses an alternate splice site in the 5' exon and lacks an alternate 5' coding exon, compared to variant 1, resulting in a protein that maintains the reading frame but is shorter, compared to isoform 1.