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Product datasheet for SC118671

Manic Fringe (MFNG) (NM_002405) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Manic Fringe (MFNG) (NM_002405) Human Untagged Clone
Tag:	Tag Free
Symbol:	Manic Fringe
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>OriGene sequence for NM_002405 edited
GAATTCGGCACGAGGGCCAACCAATGCAGTGCCGGCTCCCGCGGGGCCTGGCTGGAGCCC
TCCTCACCCTCCTGTGCATGGGGCTCCTGTGTCTGCGGTACCACTTGAACCTGTCCCCGC
AGCGGGTACAAGGGACCCCCGAGCTGAGCCAGCCGAACCCGGGGCCCCCTAAGCTACAGC
TACACGATGTCTTCATTGCAGTGAAGACGACCCGGGCTTTCCACCGCTTGCGCCTGGAGC
TGCTGCTTGACACGTGGGTTTCCAGGACCAGGGAACAGACATTTGTCTTCACCGACAGCC
CAGACAAAGGCCTCCAGGAGAGACTGGGGTCCCACCTTGTGGTCACCAACTGCTCCGCGG
AACACAGCCACCCAGCTCTGTCCTGCAAGATGGCTGCTGAGTTCGACACCTTCTTGGCCA
GTGGGCTTAGGTGGTTCTGCCATGTGGACGATGACAACTATGTGAACCCAAGGGCGCTGC
TGCAGCTTCTGAGAGCCTTCCCGCTGGCCCGCGACGTCTATGTGGGAAGGCCCAGCCTGA
ACCGGCCCATCCATGCCTCAGAGCCACAGCCCCACAACCGCACGAGGCTGGTACAGTTCT
GGTTTGCCACTGGGGGTGCTGGCTTCTGCATCAATCGCAAACTGGCTTTGAAGATGGCTC
CGTGGGCCAGTGGCTCCCGTTTCATGGACACATCTGCTCTCATCCGGCTGCCTGATGACT
GCACCATGGGCTATATCATTGAGTGCAAGCTGGGCGGCCGCCTGCAGCCCAGCCCCCTCT
TTCACTCCCACCTGGAGACCCTGCAGCTGCTGAGGACTGCACAGCTCCCAGAACAGGTCA
CCCTCAGCTACGGTGTCTTTGAGGGGAAACTCAACGTCATTAAGCTACAGGGCCCCTTCT
CCCCGGAGGAGGACCCCTCCAGATTTCGCTCCCTCCATTGTCTGCTCTATCCAGATACAC
CCTGGTGTCCCCAGCTGGGTGCCCGATGAATCCTGAACTGCTGGGCAAAGGTTGGGCAGA
GACTTCTGGGTGTGCCTTGGCTCCCAAGGTGGCACTGTGGGTCCCTGGCAAGTGTCTTGT
GATAGGCAGTCCCTGGCAGGGCCTTCGGGTGGTTGGCAAGCCCAGGATCTGAGTGGCAAT
TGGCACTGAAGGCACCCCAGGCCCCTGGGAGGTGAGTTAGACAGCCCAGGGGACCAGGTG
GACCAGGTGGTGGCCAGAGAGGCTCCAGGGGCTAGACTCCCTCAGGAGGCTGAATTGAAA
AAGGGCAGGGGGCACTTGAGCTGGGCTGGGGCTCAGGGGTCCTAACCCTTTAGGCAGTGA
CATGGCCTCTGGGTGGGGTCTGGCCGTTGGCCCTGGCTAATGTCTCTCAGTCATTCCCCT
GGGGCTCAAGCGCTGGGCCGCCCACTCCTGCCTCCCTCATCTGTGTCCCGAGTTCCTGAA
GGGACATGGGTGGAATGATGGCAGAATCCAGGGTCTGCAGCACCTGCTGTTGTTGCCAAC
CAGTCTCCCAAAGCTCCTTGCTCCCCACCCCTTGCGAACAGGACCAGATTTTGTTTGGAG
CCTCAGCATGCCGGGGCCCAGATGATGGAGCATAACGGGTCCCAGCCAATTGTGATGATC
CTTTTTGCTCATTTCCCAGCCTTTCTTGCTGTTAGGGGCTACCATGGGACCAGCTCTGGC
CAGAGGGAACTAAGCAAATCCAATAGAGATGTTTCTGGGGAAGGTTTTGCAGCCCACTCC
CCATCTTCCTGCTATAAATGTGGGTGTGATGGCTGGATCTGGGGCAGCCACCTTGCTACC
ATGAAGGAAAGGCCAAGACAATCATCCACAGCTATTCCCTCCAGCATCTGGTTCTGTACA
AAAATTAAATGCTTATTTGTTTAAGTCAAAAAAAAAAAAAAAAAACTCGAC

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_002405 unedited
TGTGCAAATTTTGTNATACGAACTCACTATAGGGCGGCCGCGAATTCGCACGAGGGCCAA
CCAATGCAGTGCCGGCTCCCGCGGGGCCTGGCTGGAGCCCTCCTCACCCTCCTGTGCATG
GGGCTCCTGTGTCTGCGGTACCACTTGAACCTGTCCCCGCAGCGGGTACAAGGGACCCCC
GAGCTGAGCCAGCCGAACCCGGGGCCCCCTAAGCTACAGCTACACGATGTCTTCATTGCA
GTGAAGACGACCCGGGCTTTCCACCGCTTGCGCCTGGAGCTGCTGCTTGACACGTGGGTT
TCCAGGACCAGGGAACAGACATTTGTCTTCACCGACAGCCCAGACAAAGGCCTCCAGGAG
AGACTGGGGTCCCACCTTGTGGTCACCAACTGCTCCGCGGAACACAGCCACCCAGCTCTG
TCCTGCAAGATGGCTGCTGAGTTCGACACCTTCTTGGCCAGTGGGCTTAGGTGGTTCTGC
CATGTGGACGATGACAACTATGTGAACCCAAGGGCGCTGCTGCAGCTTCTGAGAGCCTTC
CCGCTGGCCCGCGACGTCTATGTGGGAAGGCCCAGCCTGAACCGGCCCATCCATGCCTCA
GAGCCACAGCCCCACAACCGCACGAGGCTGGTACAGTTCTGGTTTGCCACTGGGGGTGCT
GGCTTCTGCATCAATCGCAAACTGGCTTTGAAGATGGCTCCGTGGGCCAGTGGCTCCCGT
TTCATGGACACATCTGCTCTCATCCGGCTGCCTGATGACTGCACCATGGGCTATATCATT
GAGTGCAAGCTGGGCGGCCGCCTGCAGCCCAGNCCCCTCTTTCACTCCCACCCTGGAGAC
CCTGCAGCTGCTGAAGACTGCACAGCTCCCAGAACAGGTCACCCTCAGCTACGGTGTCCT
TTGAGGGGAACCTCCACC

3' Read Nucleotide Sequence:

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>OriGene 3' read for NM_002405 unedited
TGGACCGGCGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTGACTTAAACAAAT
AAGCATTTAATTTTTGTACAGAACCAGATGCTGGAGGGAATAGCTGTGGATGATTGTCTT
GGCCTTTCCTTCATGGTAGCAAGGTGGCTGCCCCAGATCCAGCCATCACACCCACATTTA
TAGCAGGAAGATGGGGAGTGGGCTGCAAAACCTTCCCCAGAAACATCTCTATTGGATTTG
CTTAGTTCCCTCTGGCCAGAGCTGGTCCCATGGTAGCCCCTAACAGCAAGAAAGGCTGGG
AAATGAGCAAAAAGGATCATCACAATTGGCTGGGACCCGTTATGCTCCATCATCTGGGCC
CCGGCATGCTGAGGCTCCAAACAAAATCTGGTCCTGTTCGCAAGGGGTGGGGAGCAAGGA
GCTTTGGGAGACTGGTTGGCAACAACAGCAGGTGCTGCAGACCCTGGATTCTGCCATCAT
TCCACCCATGTCCCTTCAGGAACTNCGGACACANATGANGGAGGCAGGAGTGGGCGGCCC
ANCGCTTGAGCCCCCAGGGAATGACTGAGAGACATTAGCCAGGGCCAACGGCCAGACCCC
ACCCCAGAGCCATGTCACTGCCTAAAGGGTAGGACCCCTGAGCCCCAGCCCAGCTCAAGT
GCCCCTGCCCTTTTTCAATCAGCCTCCCTGAGGAGTCTAGCCCCTGGAGCTCTCTGGCCA
CCACCTGGTCCACCTGTCCCCTGGGCTGNCTACTTACCTCCCAGGGGCCTGGGTTGCCTC
AGTGCCATTGCCACTCAAACCTGGGCTTGCCACCACCCAAAGCCCTGGCAGNACTGNCTA
TACAGNAACCTGNCAGGGACCCAAAGGCACCTGGGNAGCCAGGCCACCCAAC
```

Restriction Sites: NotI-NotI

ACCN: NM_002405

Insert Size: 1820 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).

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_002405.2, NP_002396.2

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]
Transcript Variant: This variant (1) represents the longest transcript and encodes the longer isoform (1).