

Product datasheet for **MC203080**

Pofut1 (NM_080463) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Pofut1 (NM_080463) Mouse Untagged Clone
Tag: Tag Free
Symbol: Pofut1
Synonyms: mKIAA0180; O-FucT-1
Mammalian Cell Selection: Neomycin
Vector: PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection: Kanamycin (25 ug/mL)

Fully Sequenced ORF: >BC046295
GCTCCCACCCCTCCCCGCCTCCGGCCGTGGCACTCTGGGGCTCTGCCGTCGACATGGGCGCCGCCGGC
TGGGCACCGCCACACCTGCTGCTGCGGGGCTTTCTGCTTCTGCTGCTTTGCTGCCGCTCCGCGGGC
GGTCAGCGGGCTCCTGGACCTGGCCGGTTACCTGCTCTACTGTCCCTGCATGGGCGCTTTGGGAACCA
GGCTGATCACTTCTTGGGCTCCCTGGCATTGCGAAGCTGCTGAACCGCACCTTGCTGTACCTCCATGG
ATTGAATACCAACATCACAAGCCTCCTTTCACCAACCTCCATGTGCTCTACCAAAAGTACTTCAAAGTGG
AGCCTCTCCAAGCCTACCATCGGTTGTGAGCCTGGAGGACTTATGGAAAATCTGGCACCTCCCACTG
GCCCCCTGAGAAGCGAGTGGCATACTGCTTTGAGGTGGCAGCCAGCGAAGTCTGATAAGAAGACATGT
CCCATGAAGGAAGGAAATCCTTTTGGGCCATTCTGGGACCAGTTTCATGTGAGTTTCAATAAGTCAGAAC
TGTTACAGGCATTTCTTCAGCGCCTCCTACAAAGAACAATGGACCCAGAGATTTCTGCAAAAAGAGCA
TCCTGTGCTCGCACTGCCTGGGGCCCCAGCACAGTTCCCTGTCTGGAGGAACACAGGGAGCTCCAGAAG
TACATGGTGTGGTCAGATGAGATGGTGAGGACGGGAGAGGCCCTGATCAGTGCCACCTCGTCCGGCCCT
ATGTGGGCATTCTGCGCATTGGCTCCGACTGGAAGAATGCCTGTGCCATGCTGAAGGATGAACTGC
AGGGTCACACTTCATGGCTTCCCCTCAGTGTGTGGGCTATAGCCCGAGCACAGCGACCCCTCACCATG
ACCATGTGCCCTCCCTGACCTGAAGGAAATCCAGCGGGCTGTGACGCTTTGGGTGAGAGCACTGAATGCCA
GATCGGTCTACATCGCCACAGACTCTGAGAGCTACGTGTGAGAGATCCAGCAGCTTCAAAGACAAGGT
GAGGGTGGTGAGCCTGAAACCCGAGGTGGCCAGATCGACCTGTACATCCTCGGCCAGGCTGACCACTTC
ATTGAAAATGTGTCTCCTCGTTCACTGCCTTCGTGAAGCGGGAGCGGGACCTCCATGGGAGGCAGTCGT
CCTTCTTTGGCATGGACAGACCCTCCAGCTTCGGGATGAATTTTGTATCCCATCGAAGCCCCACCTCC
CACCTCAACCAGGCTTGGCTGCTAAGGATGCTCCTGGGATTACACATCCCTTTTCTTTCTGCCCAGAGG
TGGAGAACAGTACCAAGGACGTCCTGGAAGAGAAGGCATTCCATCCCAGGCATTGGCTCCCATGGTCCCC
AGCCAGGGCTGCTCTGGGCTGCATGATCATGCACATACAAAGCAGCCACCTCCAGCCTGGGCACACCCCT
GATATATACATACATACATAAATATATATATATATATAAAAAAAAAAAAAAAAAAAAA

Restriction Sites: RsrII-NotI
ACCN: NM_080463



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Insert Size:	1182 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:	<ol style="list-style-type: none">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:	BC046295 , AAH46295
RefSeq Size:	1529 bp
RefSeq ORF:	1182 bp
Locus ID:	140484
UniProt ID:	Q91ZW2
Cytogenetics:	2 H1
Gene Summary:	Catalyzes the reaction that attaches fucose through an O-glycosidic linkage to a conserved serine or threonine residue found in the consensus sequence C2-X(4,5)-[S/T]-C3 of EGF domains, where C2 and C3 are the second and third conserved cysteines. Specifically uses GDP-fucose as donor substrate and proper disulfide pairing of the substrate EGF domains is required for fucose transfer. Plays a crucial role in NOTCH signaling. Initial fucosylation of NOTCH by POFUT1 generates a substrate for FRINGE/RFNG, an acetylglucosaminyltransferase that can then extend the fucosylation on the NOTCH EGF repeats. This extended fucosylation is required for optimal ligand binding and canonical NOTCH signaling induced by DLL1 or JAGGED1. Fucosylates AGRN and determines its ability to cluster acetylcholine receptors (AChRs).[UniProtKB/Swiss-Prot Function]