

Product datasheet for **MR218637**

Pofut2 (NM_030262) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pofut2 (NM_030262) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pofut2
Synonyms:	2310011G23Rik; AI256847; BC003494; C21orf80; FUT13
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR218637 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGCGCTCAGCGTCGCTGCTGCTGCTGGCAGCGGCATCCTGGCGCCGGTCTCGGCTTCAGGAG
 AAGAAATCTGGCCTGGCCAGTCGGCGGCCGACATCCTGTGGGGGCGGCATCCCGCAGACGGTACCTCCT
 GTATGATGTCAACCCCCAGAAGCTTCAATCTCCGAGGGATGTCTATATCCGGGTGGCATCCTTGCTG
 AAGACGCTGTTGAAGACTGAAGAGTGGGTGCTAGTCTGCCCCCGTGGGGCCGCTTACCACTGGCAAA
 GCCCTGACATCCACCAGGTCCGGATTCCCTGGTCCGAGTTTTTTGACCTCCCGAGTCTCAATAAAAAACAT
 CCCCCTTATAGAGTATGAGCAGTTCATTGCAGAGTCCGGCGGCCCTTTATCGACCAGGTGTACGTCCTA
 CAAGGTTACGCCGAGGGCTGGAAGGAGGGCACCTGGGAGGAGAAGGTGGACGCACGGCCCTGTATTGACC
 CTCTGCTGTACTCGCAGGACAAGCATGAGTATTACAGAGGCTGGTTTTGGGGCTACGAAGAAACACGGGG
 TCTGAATGTCTCCTGCTCCGTCCAGGGGTCCGCTTCCATCGTCGCGCCTGTCTCTTAAAAACACA
 TCTGCTCGGTCTGTGATGCTGGACCGAGCTGAGAATCTGCTTCATGACCACTATGGAGGCCGGGAGTACT
 GGGATACCCGGCGCAGCATGGTGTGCAAGCAACTTGCGGGCTGTGGGAGACGAGTTTAGGAGCCAGCA
 CCTCAACTCGACGGATGCCGCTGATAAGATGGCCCCGGAGGAAGACTGGACGAAGATGAAGGTCAAACCTG
 GGCTCAGCACTAGGCGGCCCTACCTCGGAGTCCACCTGAGAAGGAAGGACTTCACTGGGGCCACAGGG
 AGGATGTGCCAGCCTGGAGGGCGCCGTGAAGAAGATCCGCAGCCTCATGAAGACTCATCAGCTGGACAA
 GGTGTTGCGTGGCCACAGACGCCATCAGGAAGGAGCAGGAAGAATTGAGGAAGCTGCTGCCGAAATGGTG
 AGGTTTGAGCCCACGTGGGAGGAGCTGGAGCTGTACAAGGACGGAGGCGTCGCCATCATCGATCAGTGGA
 TCTGCGCTCATGCCAGGTTTTTTATTGGCACCTGTGTTCCACATTTTCCTTTTCGATTTCATGAAGAGAG
 AGAGATCCTGGGGTTGGACCCCAAGACAACATACAACCGTTTTTGTGGAGACCAGGAGAAAGCATGTGAG
 CAGCCACACACTGGAAGATTGCGTAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR218637 protein sequence
 Red=Cloning site Green=Tags(s)

MAALSVVCLLLAAASWRPVASGEEFWPGQSAADILSGAASRRRYLLYDVPPEGFNLRRDVYIRVASLL
 KTLLKTEEWLVLPWGRLYHWQSPDIHQVRIPWSEFFDLPSLNKNIPVIEYEQFIAESGGPFIDQYVVL
 QGYAEGWKEGTWEEKVDARPCIDPLLYSQDKHEYRWFYGYEETRGLNVSCLSVQGSASIVAPVLLKNT
 SARSVMLDRAENLLHDHYGGREYWDTRRSMVFAKHLRAVGDEFRSQHLNSTDAADKMAPEEDWTKMKVKL
 GSALGGPYLGVHLRRKDFIWGHREDVPSLEGAVKKIRSLMKTHQLDKVFVATDAIRKEQEELRKLLPEMV
 RFEPTWEELELYKDGVAIIDQWICAHARFFIGTSVSTFSFRIHEEREILGLDPKTTYNRFCDQEKACE
 QPTHWKIAY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN: NM_030262

ORF Size: 1290 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_030262.3](#), [NP_084538.2](#)
RefSeq Size: 2219 bp

RefSeq ORF: 1290 bp

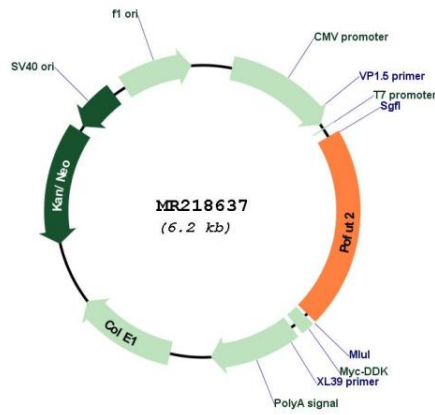
Locus ID: 80294

UniProt ID: [Q8VHI3](#)
Cytogenetics: 10 C1

MW: 49.4 kDa

Gene Summary: Catalyzes the reaction that attaches fucose through an O-glycosidic linkage to a conserved serine or threonine residue in the consensus sequence C1-X(2,3)-S/T-C2-X(2)-G of thrombospondin type I repeats (TSRs) where C1 and C2 are the first and second cysteines of the repeat, respectively. O-fucosylates members of several protein families including the ADAMTS superfamily and the thrombosporin (TSP) and spondin families. Required for the proper secretion of ADAMTS family members such as ADAMSL1 and ADAMST13 (By similarity). O-fucosylation of TSRs is also required for restricting epithelial to mesenchymal transition (EMT), maintaining the correct patterning of mesoderm and localization of the definite endoderm.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR218637