

Product datasheet for **RC217107**

POFUT2 (NM_015227) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	POFUT2 (NM_015227) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	POFUT2
Synonyms:	C21orf80; FUT13
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC217107 representing NM_015227
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGACTCAGTTCGTCTTCTGCTGCTGGGGCAGTGTCTGGCCTCCGGCTTCTGCCTCCGGCC
 AGGAGTTCGGCCGGACAATCGCGGCCGATATTCTGTGCGGGGCGGCTTCCCGCAGACGGTATCTTCT
 GTATGACGTCAACCCCCGGAAGGCTTCAACCTGCGCAGGGATGTCTATATCCGAATCGCCTCTCTCCTG
 AAGACTCTGCTGAAGACGGAGGAGTGGGTGCTTGTCTGCCTCCATGGGGCCGCCTCTACTGCGCAGA
 GTCCTGACATCCACAGGTCCGGATTCCCTGGTCTGAGTTTTTTGATCTTCCAAGTCTCAATAAAAAACAT
 CCCCCTCATCGAGTATGAGCAGTTCATCGCAGAATCTGGTGGGCCCTTTATTGACCAGGTTTACGTCCTG
 CAAAGTACGCAGAGGGGTGAAAGAAGGGACCTGGGAAGAGAAGGTGGACGAGCGGCCGTGATTGATC
 AGCTCCTGTACTCCAGGACAAGCACGAGTACTACAGAGGATGGTTTTGGGGTTATGAGGAGACCAGGGG
 TCTAAACGTCTCCTGTCTGTCCGTCCAGGGCTCAGCCTCCATCGTGGCGCCCTGCTGCTGAGAAACACA
 TCAGCCCGGTCCGTGATGTTAGACAGAGCCGAGAACCTACTTACGACCACTATGGAGGGAAAGAATACT
 GGGATACCCGTCGCAGCATGGTGTGTCAGGCACCTGCGGGAGGTGGGAGACGAGTTCAGGAGCAGACA
 TCTCAACTCCACGGACGACGACAGGATCCCTTCCAGGAGGACTGGATGAAGATGAAGTCAAGCTG
 GGCTCCGCGCTAGGGGGCCCTACCTGGGAGTCCACCTGAGAAGAAAAGATTTTCTGTTGGGGTCCAGAC
 AGGATGTACCCAGTCTGGAAGGGGCCGTGAGGAAGATCCGCAGCCTCATGAAGACCCACCGGCTGGCAA
 GGTGTTTGTGGCCACAGATGCCGTGAGAAAGGAATATGAAGAGCTAAAAAGCTGTTACCCGAGATGGTG
 AGGTTTGAACCCACGTGGGAGGAGCTGGAGCTCTACAAGGACGGAGGCGTTGCGATTATTGACCAGTGA
 TCTGCGCACACGCCAGGTGCCTGCCACGTCACGTGCGCCGAGAGCGGGTGGGTGGCTTCAAAGGTT
 CTCTGTCCCAAGTACTCGGTGTAGAGCAGATGGTGCCTGTGTTACAGTGGTCAATTCATACTGTT
 TGCTCCTCGTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC217107 representing NM_015227
 Red=Cloning site Green=Tags(s)

MATLSFVFLLLGAVSWPPASASGQEFWPGQSAADILSGAASRRRYLLYDVPPEGFNLRDYYIRIASLL
 KTLKTEEWLVLPWGRLYHWQSPDIHQVRIPWSEFFDLPSLNKNIPVIEYEQFIAESGGPFIDQYVVL
 QSYAEGWKEGTWEEKVDERPCIDQLLYSQDKHEYRGWFYGYEETRGLNVSCLSVQGSASIVAPLLLRNT
 SARSVMLDRAENLLHDHYGGKEYWDRRSMVFAHRLREVGDEFRRSRLNSTDDADRIPFQEDWMKMKVKL
 GSALGGPYLGVHLRRKDFIWGHRQDVPSLEGAVRKIRSLMKTHRLDKVVFATDAVRKEYEELKLLPEMV
 RFEPTWEELELYKGGVAIIDQWICAHARCLPTLSAESGSGGFQRFPCPKYSVSEQMVACVHSGHFHTV
 CLLV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8058_h09.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_015227

ORF Size: 1272 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_015227.6](#)

RefSeq Size: 4828 bp

RefSeq ORF: 1275 bp

Locus ID: 23275

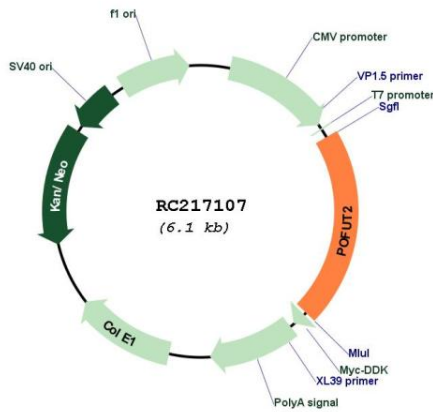
UniProt ID: [Q9Y2G5](#)

Cytogenetics: 21q22.3

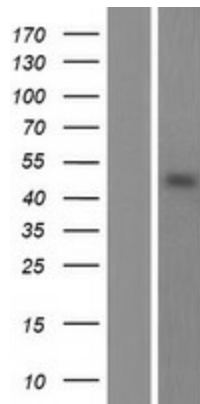
MW: 48.7 kDa

Gene Summary: Fucose is typically found as a terminal modification of branched chain glycoconjugates, but it also exists in direct O-linkage to serine or threonine residues within cystine knot motifs in epidermal growth factor (EGF; MIM 131530)-like repeats or thrombospondin (THBS; see MIM 188060) type-1 repeats. POFUT2 is an O-fucosyltransferase that use THBS type-1 repeats as substrates (Luo et al., 2006 [PubMed 16464857]).[supplied by OMIM, Mar 2008]

Product images:



Circular map for RC217107



Western blot validation of overexpression lysate (Cat# [LY414699]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217107 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).