

Product datasheet for **RG209505**

POFUT2 (NM_133635) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	POFUT2 (NM_133635) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	POFUT2
Synonyms:	C21orf80; FUT13
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG209505 representing NM_133635 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGACTCAGTTCGTCCTCCTGCTGCTGGGGCAGTGTCTGGCCTCCGGCTTCTGCCTCCGGCC
AGGAGTTCGGCCCGACAATCGCGGCCGATATTCTGTCGGGGCGGCTCCCGCAGACGGTATCTTCT
GTATGACGTCAACCCCGGAAGGCTTCAACCTGCGCAGGGATGTCTATATCCGAATCGCCTCTCTCCTG
AAGACTCTGCTGAAGACGGAGGAGTGGGTGCTTGTCTGCCTCCATGGGGCCGCTCTACTGGCAGA
GTCTGACATCCACCAGGTCCGATTCCCTGGTCTGAGTTTTTTGATCTCCAAGTCTCAATAAAAAACAT
CCCCGTACGAGTATGAGCAGTTCATCGCAGAACTGGTGGGCCCTTTATTGACCAGGTTACGTCCTG
CAAAGTTACGCAGAGGGGTGAAAGAAGGGACCTGGGAAGAGAAGGTGGACGAGCGCCGTGATTGATC
AGCTCCTGTACTCCCAGGACAAGCACGAGTACTACAGAGGATGGTTTTGGGGTTATGAGGAGACCAGGGG
TCTAAACGTCTCCTGTCTGTCCGTCCAGGGCTCAGCCTCCATCGTGGCGCCCTGCTGCTGAGAAACACA
TCAGCCCGGTCCGTGATGTTAGACAGAGCCGAGAACCTACTTCACGACCACTATGGAGGGAAGAATACT
GGGATACCCGTCGCAGCATGGTGTGGCCAGGCACCTGCGGGAGGTGGGAGACGATTCAGGAGCAGACA
TCTCAACTCCACGGACGACGACAGCAGGATCCCCTTCCAGGAGGACTGGATGAAGATGAAGTCAAGCTG
GGCTCCGCGCTAGGGGGCCCTACCTGGGAGTCCACCTGAGAAGAAAAGATTTTCACTGGGGTACAGAC
AGGATGTACCCAGTCTGGAAGGGCCGTGAGGAAGATCCGAGCCTCATGAAGACCCACCGCTGGACAA
GGTGTGTTGTGGCCACAGATGCCGTGAGAAAGGAATATGAAGAGCTAAAAAGCTGTTACCCGAGATGGTG
AGGTTTGAACCCAGTGGGAGGAGCTGGAGCTCTACAAGGACGGAGGCGTTGCGATTATTGACCAGTGGA
TCTGCGCACACGCCAGGTTTTTTATTGGCACCTCAGTCTCAACATTTTCTTTTCGGATTCATGAGGAAA
AGAAATCTGGGTTGGACCCCAAGACGACGTACAACAGGTTCTGCGGAGACCAAGAGAAGGCGTGTGAG
CAACCCACCCACTGGAAGATCACCTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG209505 representing NM_133635
Red=Cloning site Green=Tags(s)

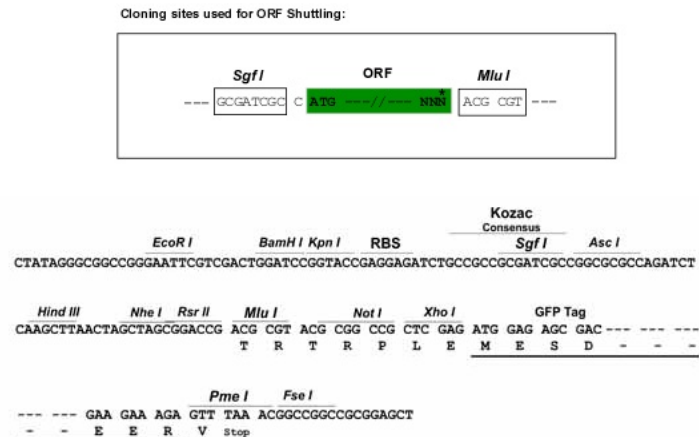
MATLSFVFLLLGAVSWPPASASGQEFWPGQSAADILSGAASRRRYLLYDVPNPEGFNLRDYYIRIASLL
 KTLLKTEEWLVLPPWGRLYHWQSPDIHQVRIWSEFFDLPSLNKNIPVIEYEQFIAESGGPFIDQYVVL
 QSYAEGWKEGTWEEKVDERPCIDQLLYSQDKHEYRWFVWGYEETRGLNVSCLSVQGSASIVAPLLLRNT
 SARSVMLDRAENLLHDHYGGKEYWDTRRSMVFARHLREVGDEFRRSRHLNSTDDADRIPFQEDWMKMKVKL
 GSALGGPYLGVHLRRKDFIWGHRQDVPSPLEGAVRKIRSLMKTHRLDKVVFATDAVRKEYEELKLLPEMV
 RFEPTWEELELYKDGVAIIDQWICAHARFFIGTSVSTFSFRIHEEREILGLDPKTTYNRFCDQEKACE
 QPTHWKITY

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_133635

ORF Size: 1287 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_133635.6](#)

RefSeq Size: 2878 bp

RefSeq ORF: 1290 bp

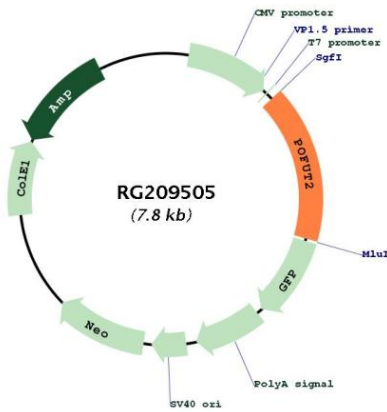
Locus ID: 23275

UniProt ID: [Q9Y2G5](#)

Cytogenetics: 21q22.3

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 RG209505