

## Specifications:

Gene:	mFFAR3/GPR41
Accession:	NP_001028488
Insert size:	973bp
Concentration:	10µg at 0.2µg/µL

## mFFAR3/GPR41 cDNA Plasmid

Ffar3 free fatty acid receptor 3  
[ *Mus musculus* ]

Also known as: Gm478; Gpr41

### Summary:

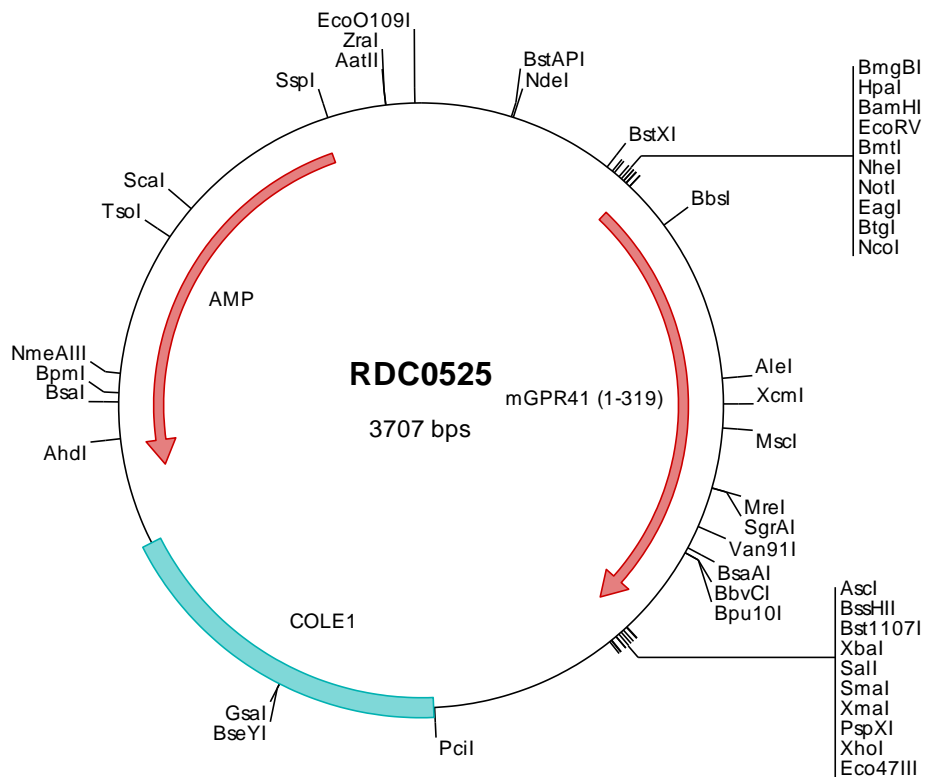
Free fatty acids not only are essential nutrients but also act as signaling molecules in various cellular processes. Short-chain fatty acids (SCFA) can activate GPR41, also known as FFAR3, and GPR43 (FFAR2). GPR41 has been reported to be expressed in adipose tissue and to promote secretion of leptin. SCFAs and ketone bodies directly regulate GPR41-mediated SNS activity and thereby control body energy expenditure in maintaining metabolic homeostasis.

## Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

## Preparation and Storage

Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.





> RDC0525 Plasmid DNA Sequence

1 tcgcgcggtt cggatgatgac ggtgaaaacc tetgacacat gcaagctccc gagacggtca cagcttgtct gtaagcggat gccgggagca gacaagcccg
101 tcaggggcgc tcagcgggtg ttggcgggtg tccgggctgg cttactatg cggcatcaga gcagattgta ctgagagtgc accatatgcg gttgtaaata
201 ccgcacagat gcgtaaggag aaaataccgc atcaggcgcc attcgccatt caggctgccc aactgttggg aaggcgatc ggtcggggcc tcttcgctat
301 taacgacgct ggcgaaaggg ggatgtgctg caaggcgatt aagtgggta acgcccgggt ttcccagtc acgacgtgtg aaaacgacgg ccagtgaatt
401 ggagacgtgt taacaagcctt ggatccgata tccgtagcgc ggcgcccacc atggggacaa gcttctttct tggcaattac tggcttttct tttcogtga
501 cctgttggtg ttcctcgttg gactccccct caacgtgatg gccctgggtg tctcgtggg caagctgccc cgacgcccag tggctgtgga cttacttttg
601 ctaaaactga ccatttccga cctgctcctg ctctctctcc tgcctttccg catggtggag gcagcatgtg gcattgagatg gcttctgccc ttaactctct
701 gcccccttcc tgggttccctt ttcttaccac ctatttacct cacctcccct ttctgacgg cggtagcatc cgaaactttt ctgagcgtgg cctatccact
801 gtggtacaaa acccgccccg gctggccccg ggctggctcg gtcagtgtag tctgttgggt cctggcatcg gctcactgta gtgtggttta catoactgaa
901 taactgggaa atgcaacctc cagccagggg accaatggaa cctgctacct ggaattccgg gaggaccagc tggccatcct cctgcctgta cgactagaga
1001 tggctgtggt ccttttcatg gtgcccctgt gtatcacagag ttaactgtac agtgcctcgg tgtggatact gagccggggg gccagccggc gccggcgcaa
1101 gaggataatg gggcttcttg cagccacaact gctcatcttc ttctctctct tccggcccct taatatgtcc catgtggtgg gctatgtcag ccgtgagagt
1201 cctcctcctg ggagctcact gctcctcctc agcaccctca actcttctat cgaacccctg gttttctact tttcttctc caagttccaa gccacttctc
1301 atcaactcct ggggaggtg ctcagaactt gtgtgccttg gactcagcaa gtcagcctgg aactgaaggt aaagaatgga gaagagccat ccaaggagtg
1401 tccgagctaa aggcgcccga gtatactcta gagtcgacac ccggggaatt cctcgaagcc tctgtctctag cttggcgtaa tcatggtcoat agctgtttcc
1501 tgtgtgaaat tgttatccgc tcacaattcc acacaacata cgagccggaa gcataaagt taagcctgg ggtgcctaat gattgagcta actcacatta
1601 attgctgtgc gctcactgcc cgttttccag tccggaaaac tgtcgtgcca gctgcattaa tgaatcggcc aacgcgcggg gagaggcggg ttgcgtattg
1701 ggcgctcttc cgttctcctg ctcaactgact cgtcgcgctc ggtcgttccg ctgcggcgag ctgcggcgag cggatcagc tcaactcaaa gctgtaatac
1801 agaatcaggg gataacgcaag gaaagaacat gtgagcaaaa ggcagcaaaa agccagcaaaa cggtaaaaaa gccgcgttgc tggcgttttt ccataggtc
1901 cgccccctg acgagcatca caaaaaatga cgtcgaagtc agaggtggcg aaaccggaca ggactataaa gataccaggc gtttccccct ggaagctccc
2001 tctgtcgtcc tctcgttccg accctgcccg ttaccggata cctgtcccct tttctccctt cgggaaagct ggcgctttct caatgctcac gctgtaggta
2101 tctcagttcg gtgtaggctg ttcgctccaa cgtggctgt gtgcacgaac cccccgtca gcccaccgc tgcgccttat ccgtaacta tctcttgag
2201 tccaaccgg taagacacga cttatcgcca ctggcagcag ccactggtaa caggattagc agagcagagt atgtaggcgg tgctacagag tctttagagt
2301 ggtggcctaa ctacggctac actagaagga cagtatttgg tatctgcgct ctgctgaagc cagttacctt cggaaaaaga gttggtagct cttgatccgg
2401 caaacaacc accgctggtg cgggtggttt ttttgtttgc aagcagcaga ttacgcgcag aaaaaaagga tctcaagaag atcctttgat ctttctacg
2501 gggctgacg ctcagtggaa cgaaaaactca cgttaaggga ttttggctat gagattatca aaaaggatct tcacctagat ccttttaaat taaaaatgaa
2601 gttttaaatc aatctaaagt atatatgagt aaacttggtc tgacagttac caatgcttaa tcagtgagc acctatctca gcgatctgtc tatttcgttc
2701 atccatagtt gcctgactcc ccgtcgtgta gataactacg atacgggagg gcttaccatc tggccccagt gctgcaatga tacccggaga cccaactca
2801 ccggctccag atttatcagc aataaaccag ccagccggaa gggccgagcg cagaagtggt cctgcaactt tatccgctc catccagtct attaattgtt
2901 gccgggaagc tagagtaagt agttcgccag ttaatagttt ggcgcaactt gttgccattg ctacagccat cgtggtgtca cgtcgtcgt ttggtagtgc
3001 ttcattcagc tccggttccc aacgatcaag cgcagttaca tgatccccca tgttgtgcaa aaaagcgggt agctccttcg gtcctccgat cgttgtcaga
3101 agtaagttgg ccgcagtgtt atcactcatg gttatggcag cactgcataa ttctctact gtcattgccat ccgtaagatg cttttctgtg actggtgagt
3201 actcaaccaa gtcattctga gaatagtgtg tgcggcgacc gagttgctct tgccccgct caatacggga taataccgg ccacatagca gaactttaa
3301 agtgcctatc attggaaac gttcttcggg cgcgaaaact tcaaggatct taccgctgtt gagatccagt tcatgtaac ccactcgtgc acccaactga
3401 tcttcagat ctttactttt caccagcgtt tctgggtgag caaaaacaa agggcaaaat gccgcaaaa agggaataag ggcgacacgg aaatgtgaa
3501 tactcactat ctttcttttt caatattatt gaagcattta tcaagggtat tgtctcatga gcggtacat atttgaatgt atttagaaaa ataaaaaat
3601 aggggttccg cgcacatttc cccgaaaagt gccactgac gtctaagaaa ccattattat catgacatta acctataaaa ataggcgtat caccagggcc
3701 tttcgtc

> RDC0525 Translated Insert Sequence

1 mgtsfflgn ywlffsvyllv flvglplnm alvvfvgkl rrpvavdl11 lnltisd111 llflpfrmve aacgmrwllp fifcplsgfl ffttiyltsl
101 fltavsierf lsvayplwyk trprlaqagl vsvvcwflas ahcsvvyite ywgnatysqg tngtctylefr edqlaillpv rlemavvlfm vplcitsycy
201 srlvwilsrg asrrrrkrim gllaatlif fvcfgpynms hvvgvysres psrwsyvlll stlnscidpl vfyfssskfq adfhqllgrl lrtcvpwtqg
301 vslelkvkng eepskecps