

## **Product datasheet for RR202773**

### Ffar4 (NM\_001047088) Rat Tagged ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** Ffar4 (NM\_001047088) Rat Tagged ORF Clone

Tag: Myc-DDK

Symbol: Ffar4

Synonyms: Gpr120; O3far1

Mammalian Cell

Selection:

Neomycin

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

ORF Nucleotide >RR202773 representing NM\_001047088
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGTCCCCTGAGTGTGCGCAGACGACGGGCCCTGGCCCCTCGCGCACCCGGACCAAGTCAATCGCACCC ACTTCCCTTTCTTCGGATGTCAAGGGCGACCACCGGCTGGTGCTGAGCGTCCTGGAGACCACCGTTCT GGGACTCATCTTTGTGGTCTCACTGCTGGGCAACGTGTGTGCCCTGGTGCTGGTGGTGCGCCGTCGGCGC CGTGGGGCGACAGTCAGCTTGGTGCTCAACCTCTTCTGCGCGGATTTGCTCTTCACCAGCGCCATCCCTC TAGTGCTCGTGGTGCGCTGGACTGAAGCCTGGCTGCTGGGGCCCGTCGTCTGCCACCTGCTCTTCTACGT GATGACCATGAGCGCAGCGTCACGATCCTCACGCTGGCCGCGGTCAGCCTGGAGCGCATGGTGTGCATC GTGCGCCTGCGGCGCGGCTTGAGCGGCCCGGGGCGGCGGACTCAGGCGGCGCTGCTGGCTTTCATATGGG GTTACTCGGCGCTCGCCGCGCTGCCCCTCTGCATCTTGTTCCGCGTGGTCCCGCAGCGCCTTCCCGGCGG GGACCAGGAAATTCCGATCTGCACATTGGATTGGCCCAACCGCATAGGAGAAATCTCATGGGATGTTTT TTTGTGACTTTGAACTTCCTGGTACCAGGACTGGTCATTGTGATCAGCTACTCCAAGATTTTACAGATCA CGAAAGCCTCGCGGAAGAGGCTTACGCTGAGCTTGGCATACTCCGAGAGCCACCAGATCCGAGTGTCCCA GCAGGACTACCGGCTCTTCCGAACGCTCTTCCTGCTCATGGTTTCCTTCATCATCATGTGGAGTCCCATC ATCATCACCATCCTCATCTTGATCCAGAACTTCCGGCAGGACCTGGTTATCTGGCCGTCCCTTTTCT TCTGGGTGGTGGCCTTCACGTTTGCCAACTCCGCCCTAAACCCCATTCTGTACAACATGTCGCTGTTCAG GAGCGAGTGGAGGAAGATTTTTTGCTGCTTCTTTTTCCCAGAGAAGGGAGCCATTTTTACAGAAACGTCT ATCAGGCGAAATGACTTGTCTGTTATTTCCACC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RR202773 representing NM\_001047088

Red=Cloning site Green=Tags(s)

MSPECAQTTGPGPSRTPDQVNRTHFPFFSDVKGDHRLVLSVLETTVLGLIFVVSLLGNVCALVLVVRRRR RGATVSLVLNLFCADLLFTSAIPLVLVVRWTEAWLLGPVVCHLLFYVMTMSGSVTILTLAAVSLERMVCI VRLRRGLSGPGRRTQAALLAFIWGYSALAALPLCILFRVVPQRLPGGDQEIPICTLDWPNRIGEISWDVF FVTLNFLVPGLVIVISYSKILQITKASRKRLTLSLAYSESHQIRVSQQDYRLFRTLFLLMVSFFIMWSPI IITILLILIQNFRQDLVIWPSLFFWVVAFTFANSALNPILYNMSLFRSEWRKIFCCFFFPEKGAIFTETS IRRNDLSVIST

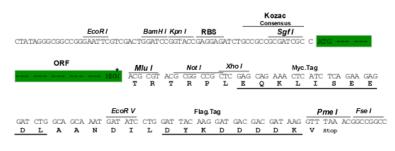
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: <a href="https://cdn.origene.com/chromatograms/ja2138">https://cdn.origene.com/chromatograms/ja2138</a> e08.zip

**Restriction Sites:** Sgfl-Mlul

Cloning Scheme:





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_001047088

ORF Size: 1083 bp

**OTI Disclaimer:** 

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:customer.com">customer.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.

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. <u>More info</u>

#### Ffar4 (NM\_001047088) Rat Tagged ORF Clone - RR202773

**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: <u>NM 001047088.1</u>, <u>NP 001040553.1</u>

RefSeq Size: 1388 bp
RefSeq ORF: 1086 bp
Locus ID: 294075
UniProt ID: Q2AC31
Cytogenetics: 1q53

**MW:** 41.4 kDa

**Gene Summary:** Receptor for medium and long-chain free fatty acids (FFAs). Signals via a G(q)/G(11)-coupled

pathway. Acts as a receptor for omega-3 fatty acids and mediates robust anti-inflammatory effects, particularly in macrophages and fat cells. The anti-inflammatory effects involve inhibition of TAK1 through a beta-arrestin 2 (ARRB2)/TAB1-dependent effect, but independent of the G(q)/G(11)-coupled pathway. Mediates potent insulin sensitizing and antidiabetic effects by repressing macrophage-induced tissue inflammation. May mediate the taste of

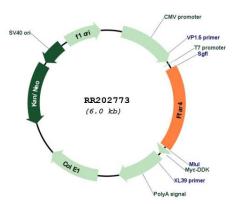
fatty acids. Mediates FFA-induced inhibition of apoptosis in enteroendocrine cells. May play a

role in the regulation of adipocyte development and differentiation (By similarity).

[UniProtKB/Swiss-Prot Function]



# **Product images:**



Circular map for RR202773