

Product datasheet for MR222997

Ffar1 (NM_194057) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ffar1 (NM_194057) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ffar1
Synonyms:	Gpr40
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR222997 representing NM_194057 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGACCTGCCCCACAGCTCTCCTTCGCTCTCTATGTATCTGCCTTTGCGCTGGGCTTCCATTGAACT
TGTTAGCCATCCGAGGCGCAGTGTCCCACGCTAACTGCGACTCACTCCCAGCTTGGTCTACACTCTCCA
TCTGGGCTGCTGATCTCCTACTGGCCATCACTCTGCCCTGAAGGCTGTGGAGGCCCTGGCTTCTGGA
GCCTGGCCCTGCCGCTCCCTTCTGCCAGTCTTTGCCCTGGCCACTTTGCTCCCTCTACGCAGGCG
GAGGCTTCTAGCTGCTCTCAGCGCTGGCCGCTACCTGGGGCTGCCTTCCCTTCGGGTACCAAGCCAT
CCGGAGGCCCGCTATTCTGGGGTGTGTGTGGCTATATGGGCCCTTGTCTCTGCCACTGGGGCTG
GCCCTTGGCTTGGAGACTTCCGGAAGCTGGCTGGACAACAGTACCAAGTCCCTGGGCATCAACATACCCG
TGAATGGCTCCCCGGTCTGCCTGGAAGCCTGGGATCCCGACTCTGCCCGCCCTGCCCGTCTCAGTTTCTC
CATTCTGCTCTTCTTCTGCCCTTGGTCATCACTGCCTTCTGCTATGTGGGCTGCCTCCGGGCCCTGGT
CGCTCAGGCTGAGCCACAAACGGAAGCTCAGGGCAGCTTGGGTGGCCGGAGGCGCTCTCCTCACACTCC
TGCTCTGCCTGGGGCCCTATAATGCCTCCAATGTGGCTAGTTTCATAAACCCGGACCTAGGAGGCTCCTG
GAGGAAGTTGGGACTCATCACAGGGCCCTGGAGTGTGGTACTCAACCCACTGGTCACTGGTACTTGGGA
ACAGGTCTGGACGGGAACAATATGTGTGACGAGGACTCAAAGAGGAACAATTGAGAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR222997 representing NM_194057
Red=Cloning site Green=Tags(s)

MDLPPQLSFALYVSFAFALGFPLNLLAIRGAVSHAKLRLTPSLVYTLHLGCSDLLLAITLPLKAVEALASG
 AWPLPLPFCPVFALAHFAPLYAGGGFLAAL SAGRYLGAAPFGYQAIRRPRYSWVCVAIWALVLCGLGL
 ALGLETSGSWLDNSTSSLGINIPVNGSPVCLEAWDPDSARPARLSFSILLFFLPLVITAFICYVGLRALV
 RSLGSHKRKLRAAWVAGGALLLLLLCLGPYNASNVASF INPDLGGSWRKLGLITGAWSVVLNPLVTGYLG
 TGPGRGTICVTRTQRGTIQK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1340_a01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_194057

ORF Size: 900 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_194057.2](#), [NP_918946.2](#)

RefSeq Size: 903 bp

RefSeq ORF: 903 bp

Locus ID: 233081

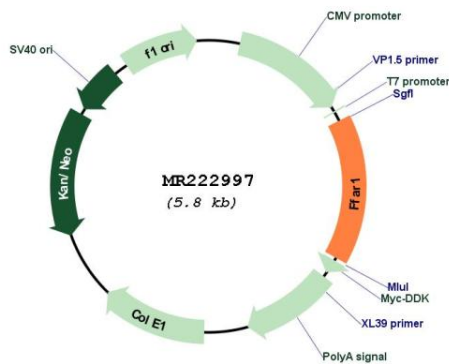
UniProt ID: [Q76JU9](#)

Cytogenetics: 7 B1

MW: 32.3 kDa

Gene Summary: G-protein coupled receptor for medium and long chain saturated and unsaturated fatty acids that plays an important role in glucose homeostasis. Fatty acid binding increases glucose-stimulated insulin secretion, and may also enhance the secretion of glucagon-like peptide 1 (GLP-1). May also play a role in bone homeostasis; receptor signaling activates pathways that inhibit osteoclast differentiation (PubMed:23335512). Ligand binding leads to a conformation change that triggers signaling via G-proteins that activate phospholipase C, leading to an increase of the intracellular calcium concentration. Seems to act through a G(q) and G(i)-mediated pathway.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR222997