

Product datasheet for **MR225708**

Fgfr1 (NM_010206) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Fgfr1 (NM_010206) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Fgfr1
Synonyms:	AW208770; bFGF-R-1; c-fgr; Eask; Fgfr-1; FGFR-I; FLG; Flt-2; Hspy; MFR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR225708 representing NM_010206
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTGGGGCTGGAAGTGCCTCCTTCTGGGCTGTGCTGGTACAGCCACTCTCTGCACTGCCAGGCCAG
 CCCAACCTTGCTGAACAAGCTCAGCCCTGGGGAGTCCCTGTGGAAGTGGAGTCTCTCCTGGTCCACCC
 TGGCGACCTGCTACAGCTTCGCTGTGCGCTTCGCGATGATGTGCAGAGCATCAACTGGCTGCGGGATGGG
 GTGCAGCTGGTGGAGAGCAACCGTACCCGCATCACAGGGGAGGAGGTGGAGGTGCGGGACTCCATCCCCG
 CTGACTCTGGCCTCTACGCTTGCCTGACCAGCAGCCCCTCTGGCAGCGTACCACCTACTTCTCCGTCAA
 TGTCTCAGATGCACTCCATCCTCGAAGATGATGACGACGACGATGACTCCTCCTCGGAGGAGAAAAGAG
 ACGGACAACACCAAAACCAACCGTAGGCCTGTAGCTCCCTACTGGACATCCCCAGAGAAAATGGAGAAGA
 AACTGCATGCGGTGCCCGCTGCCAAGACGGTGAAGTTCAAGTGCCCGTCGAGTGGGACACCCAACCCAC
 TCTGCGCTGGTTGAAAAATGGCAAAGAGTTTAAGCCTGACCACCGAATTGGAGGTACAAGTTTCGCTAT
 GCCACCTGGAGCATCATAATGGATTCTGTGGTGCCTTCTGACAAGGGCAACTACACCTGCATCGTGGAGA
 ATGAGTATGGGAGCATCAACCACACCTACCAGCTTGACGTCGTGGAACGATCTCCGCACCCAGCCATCCT
 TCAGGCAGGGCTGCCTGCCAACAAAGACAGTGGCCCTGGGCAGCAATGTGGAGTTCATGTGTAAGGTGTAC
 AGCGATCCGCAGCCTCACATTCAGTGGCTGAAGCACATCGAGGTGAACGGGAGTAAGATCGGGCCAGACA
 ACTTGGCGTATGTCCAGATCCTGAAGACTGCTGGAGTTAATACCACCGACAAGGAAATGGAGGTGCTTCA
 TCTACGGAATGTCTCCTTGAGGATGCGGGGGAGTACGCTGCTTGGCGGGTAACTCTATCGGACTCTCC
 CATCACTCTGCATGGTTGACCGTCTTGGAAAGCCCTGGAAGAGAGACCAGCTGTGATGACCTACCCGCTCT
 ACCTGGAGATCATTATCTACTGCACCGGGCCCTCCTGATCTCCTGCATGTTGGGCTCTGTCATCATCTA
 TAAGATGAAGAGCGGCACCAAGAAGAGCGACTTCCATAGCCAGATGGCTGTGCACAAGCTGGCCAAGAGC
 ATCCCTCTGCGCAGACAGGTAACAGTGTGAGTACTCCAGTGCATCCATGAACTCTGGGGTTCCTCTGG
 TTCGGCCCTCACGGCTCTCCTCCAGCGGGACCCCATGCTGGCTGGAGTCTCCGAATATGAGCTCCCTGA
 GGATCCCCGCTGGGAGCTGCCACGAGACAGACTGGTCTTAGGCAAACCACTTGGCGAGGGCTGCTTCGGG
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 AGATGTTGAAGTCCGACGCAACGGAGAAGGACCTGTGCGATCTGATCTCGGAGATGGAGATGATGAAAAT
 GATTGGGAAGCACAAGAATATCATCAACCTTCTGGGAGCGTGCACACAGGATGGTCTCTTATGTCATT
 GTGGAGTACGCCCTCAAAGGCAATCTCCGGGAGTATCTACAGGCCGGAGGCCTCCTGGGCTGGAGTACT
 GCTATAACCCAGCCACAACCCCGAGGAACAGCTGCTTCCAAAGATCTGGTATCCTGTGCCTATCAGGT
 GGCTCGGGGCATGGAGTATCTTGCTCTAAGAAGTGTATACACCGAGACCTGGCTGCTAGGAACGTCCTG
 GTGACCGAGGATAACGTAATGAAGATCGCAGACTTTGGCTTAGCTCGAGACATTCATCATATCGACTACT
 ACAAGAAAACCAACCGCCGGCTGCCTGTGAAGTGGATGGCCCTGAGGCGTTGTTTGACCGGATCTA
 CACACACCAGAGCGATGTGTGGTCTTTTGGAGTGTCTTGTGGGAGATCTTCACTCTGGGTGGCTCCCCA
 TACCCCGGTGTGCTGTGGAGGAACTTTCAAGCTGTGAAGGAGGTGATCGAATGGACAAGCCAGTA
 ACTGTACCAATGAGCTGTACATGATGATGCGGGACTGCTGGCATGCAAGTCCCTCTCAGAGACCTACGTT
 CAAGCAGTTGGTGAAGACCTGGACCGCATTGTGGCCTTGACCTCCAACCAGGAGTATCTGGACCTGCC
 ATACCGCTGGACCAAGTACTCACCCAGCTTCCCGACACACGGAGCTCCACCTGCTCCTCAGGGGAGGACT
 CTGCTTCTCTCATGAGCCGTTACCTGAGGAGCCCTGTCTGCCTCGACACCCACCCAGCTTGCCAACAG
 TGGACTCAAACGGCGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR225708 representing NM_010206
Red=Cloning site Green=Tags(s)

MWGWKCLLFWAVLVTATLCTARPAPTLPEQAQPWGVPEVESLLVHPGDLLQLRCRLRDDVQSINWLRDG
VQLVESNRTRITGEEVEVRDSIPADSGLYACVTSSPSGSDTTYFSVNVSDALPSSSEDDDDDDSSSEEKE
TDNTKPNRRPVAPYWTSPEKMEKKLHAVPAAKTVKFKCPSGTPNPTLRWLKNGKEFKPDHRIGGYKVRY
ATWSIIMDSVVP SDKGNYTCIVENEYGSINHTYQLDVVERSPHRPILQAGLPANKTVALGSNVEFMCKVY
SDPQPHIQWLKHIEVNGSKI GPDNLPYVQILKTAGVNTTDKEMEVLHLRNVSFEDAGEYTCLAGNSIGLS
HHSAWLTVLEALEERPAMTSPLYLEIIYCTGAFLISCM LGSVIYKMKSGTKKSDFHSM AVHKLAKS
IPLRRQVTVSADSSASMNSGVLLVRPSRLSSSGTPMLAGVSEYELPEDPRWELPRDRLVLGKPLGEGCFG
QVVLAEAIGLDKDPNRVTKVAVKMLKSDATEKDLSDLISEMEMMKMIGKHKNIIINLLGACTQDGPLYVI
VEYASKGNLREYLQARRPPGLECYNPSHNPEEQ LSSKDLVSCAYQVARGMEYLASKKCIHRDLAARNVL
VTEDNVMKIADFG LARDIHHIDYKKTNGRLPVKWM APEALFDRIYTHQSDVVSFGVLLWEIFTLGGSP
YPGVPEELFKLLKEGHRMDKPSNCTNELYMMRDCWHAVPSQRPTFKQLVEDLDRIVALTSNQEYLDLS
IPLDQYSPFPDTRSSTCSSGEDSVFSHEPLPEEPCLPRHPTQLANSGLKRR

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9009_e12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:


ACCN: NM_010206

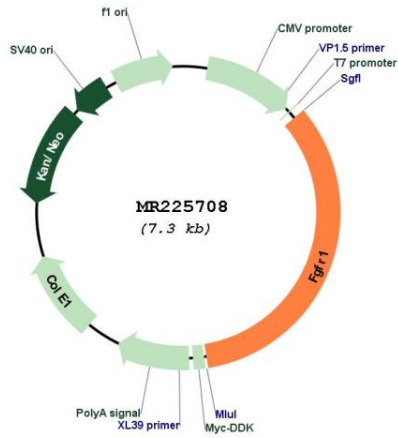
ORF Size: 2466 bp

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 custsupport@origene.com 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. [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:	<ol style="list-style-type: none">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_010206.3</u>
RefSeq Size:	5008 bp
RefSeq ORF:	2469 bp
Locus ID:	14182
UniProt ID:	<u>P16092</u>
Cytogenetics:	8 14.12 cM
MW:	92.4 kDa
Gene Summary:	<p>Tyrosine-protein kinase that acts as cell-surface receptor for fibroblast growth factors and plays an essential role in the regulation of embryonic development, cell proliferation, differentiation and migration. Required for normal mesoderm patterning and correct axial organization during embryonic development, normal skeletogenesis and normal development of the gonadotropin-releasing hormone (GnRH) neuronal system. Phosphorylates PLCG1, FRS2, GAB1 and SHB. Ligand binding leads to the activation of several signaling cascades. Activation of PLCG1 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate. Phosphorylation of FRS2 triggers recruitment of GRB2, GAB1, PIK3R1 and SOS1, and mediates activation of RAS, MAPK1/ERK2, MAPK3/ERK1 and the MAP kinase signaling pathway, as well as of the AKT1 signaling pathway. Promotes phosphorylation of SHC1, STAT1 and PTPN11/SHP2. In the nucleus, enhances RPS6KA1 and CREB1 activity and contributes to the regulation of transcription. FGFR1 signaling is down-regulated by IL17RD/SEF, and by FGFR1 ubiquitination, internalization and degradation (By similarity).[UniProtKB/Swiss-Prot Function]</p>

Product images:



Circular map for MR225708