

Product datasheet for **MG225710**

Fgfr1 (NM_001079909) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Fgfr1 (NM_001079909) Mouse Tagged ORF Clone
Tag:	TurboGFP
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-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide
Sequence:**

>MG225710 representing NM_001079909
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTGGGGCTGGAAGTGCCTCCTCTTCTGGGCTGTGCTGGTACACGCCACTCTCTGCACTGCCAGGCCAG
 CCCAACCTTGCCGAACAAGATGCACTCCCATCCTCGGAAGATGATGACGACGACGATGACTCCTCCTC
 GGAGGAGAAAGAGACGGACAACACCAAAACCAACCCTGTAGCTCCCTACTGGACATCCCCAGAGAAAATG
 GAGAAGAAACTGCATGCGGTGCCGCTGCCAAGACGGTGAAGTTCAAGTGCCCGTCGAGTGGGACACCCA
 ACCCCACTCTGCGCTGGTTGAAAAATGGCAAAGAGTTTAAAGCCTGACCACCGAATTGGAGGCTACAAGGT
 TCGCTATGCCACCTGGAGCATATAATGGATTCTGTGGTGCCTTCTGACAAGGGCAACTACACCTGCATC
 GTGGAGAATGAGTATGGGAGCATCAACCACACCTACCAGCTTGACGTCGTGGAACGATCTCCGACCCGAC
 CCATCCTTCAGGCAGGGCTGCCTGCCAACAAGACAGTGGCCCTGGGCAGCAATGTGGAGTTCATGTGTA
 GGTGTACAGCGATCCGCAGCCTCACATTAGTGGCTGAAGCACATCGAGGTGAACGGGAGTAAGATCGGG
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 ACTCTCCCATCACTCTGCATGGTTGACCCTTCTGGAAGCCCTGGAAGAGAGACCAGCTGTGATGACCTCA
 CCGCTCTACCTGGAGATCATTATCTACTGCACCGGGGCCCTTCTGATCTCCTGCATGTTGGGCTCTGTCA
 TCATCTATAAGATGAAGAGCGGCACCAAGAAGAGCGACTTCCATAGCCAGATGGCTGTGCACAAGCTGGC
 CAAGAGCATCCCTCTGCGCAGACAGGTAACAGTGTGAGTGCAGTCCAGTGCATCCATGAACCTCTGGGTT
 CTCCTGGTTCGGCCCTCACGGCTCTCCTCCAGCGGGACCCCATGCTGGCTGGAGTCTCCGAATATGAGC
 TCCCTGAGGATCCCCGCTGGGAGCTGCCACGACAGACTGGTCTTAGGCAAACCACTTGGCGAGGAGCTG
 CTTCCGGCAGGTGGTGTGGCTGAGGCCATCGGGCTGGATAAAGGACAAACCAACCGTGTGACCAAAAGT
 GCCGTGAAGATGTTGAAGTCCGACGCAACGAGAGAAGGACCTGTCGGATCTGATCTCGGAGATGGAGATGA
 TGAAAATGATTGGGAAGCACAAGAATATCATCAACCTTCTGGGAGCGTGCACACAGGATGGTCTCTTTA
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 GAGTACTGCTATAACCCAGCCACAACCCGAGGAACAGCTGTCTTCAAAGATCTGGTATCCTGTGCCT
 ATCAGGTGGCTCGGGCATGGAGTATCTTGCTTAAGAAGTGTATACACCGAGACCTGGCTGCTAGGAA
 CGTCTGGTGACCGAGGATAACGTAATGAAGATCGCAGACTTTGGCTTAGCTCGAGACATTCATCATATC
 GACTACTACAAGAAAACCAACCGCCGGCTGCCTGTGAAGTGGATGGCCCTGAGGCGTTGTTTGACC
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 CTCCCCATACCCCGTGTGCCTGTGGAGGAACCTTTCAAGCTGTGAAGGAGGGTTCATCGAATGGACAAG
 CCCAGTAACTGTACCAATGAGCTGTACATGATGATGCGGGACTGTGGCATGCAGTGCCTCTCAGAGAC
 CTACGTTCAAGCAGTTGGTGGAGACCTGGACCGATTGTGGCCTTGACCTCAAACAGGAGTATCTGGA
 CCTGTCCATACCGCTGGACCACTACTACCCAGCTTTCCCGACACACGGAGCTCCACCTGCTCCTCAGGG
 GAGGACTCTGTCTTCTCATGAGCCGTTACCTGAGGAGCCCTGTCTGCCTCGACACCCACCCAGCTTG
 CCAACAGTGGACTCAAACGGCGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG225710 representing NM_001079909
 Red=Cloning site Green=Tags(s)

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MWGWKLLFWAVLVATLCTARPAPTLPEQDALPSEDDDDDDSSSEKETDNTKPNPVAPYWTSPEKM
EKKLHAVPAAKTVKFKCPSSTGNPTLRWLKNGKEFKPDHRIGGYKVRYATWSIIMDSVVPDCKGNYTCI
VENEYGSINHXYQLDVVERSPHRPILQAGLPANKTVALGSNVEFMCKVYSDPQPHIQWLKHIEVNGSKIG
PDNLPLYVQILKTAGVNTTDKEMEVLHLRNVSFEDAGEYTCLAGNSIGLSHHSAWLTVLEALEERPAMTS
PLYLEIIIIYCTGAFLLISCM LGSVIIYKMKSGTKK SDFHSQMAVHKLAKSIPLRRQVTVSADSSASMSGV
LLVRPSRLSSSGTPMLAGVSEYELPEDPRWELPRDRLVLGKPLGEGCFGQVVLAEAIGLDKDKPNRVTKV
AVKMLKSDATEKDLSDLISEMEMMKMIGKHNIINLLGACTQDGPLYVIVEYASKGNLREYLQARRPPGL
EYCYNPSHNPEEQLSSKDLVSCAYQVARGMEYLASKKCIHRDLAARNVLVTEDNVMIADFGLARIDIHHI
DYYKKTNGRPLPVKWMPEALFDRIYTHQSDVWSFGVLLWEIFTLGGSPYPGVPVEELFKLLKEGHRMDK
PSNCTNELYMMMRDCWHAVPSQRPTFKQLVEDLDRIVALTSNQEYLDLSIPLDQYSPSPDTRSSTCSSG
EDSVFSHEPLPEEPCLPRHPTQLANSGLKRR
```

TRTRPLE - GFP Tag - V

Chromatograms: https://cdn.origene.com/chromatograms/ja1837_a12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001079909

ORF Size: 2193 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:

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_001079909.1](#), [NP_001073378.1](#)

RefSeq Size: 4741 bp

RefSeq ORF: 2202 bp

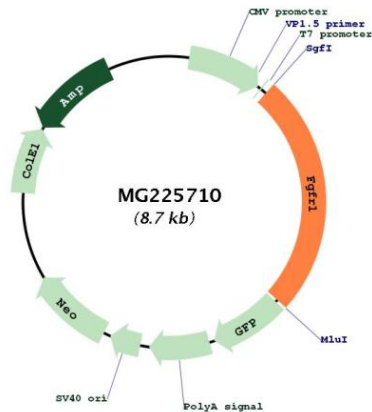
Locus ID: 14182

UniProt ID: [P16092](#)

Cytogenetics: 8 14.12 cM

Gene Summary:

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]

Product images:


Circular map for MG225710