

Product datasheet for **MG226914**

Fgfr3 (NM_001163215) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Fgfr3 (NM_001163215) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Fgfr3
Synonyms:	CD333; Fgfr-; Fgfr-3; Flg-2; FR3; HBGF; HBGFR; Mfr3; sa; sam3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG226914 representing NM_001163215
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGTAGTCCCGCCTGCGTGCTAGTGTCTGCGTGGCGTCTGGCTGGAGCTACTCCGAGCCTCTG
 GTCAGAGCAGCGAGTTGTGCGGAGAGCGCAGAGGTTCCAGGGCCTGAACCTAGCCAGCAGGAGCAGGT
 GGCTTCCGGCAGTGGGGACACCGTGGAGCTGAGCTGCCATCCTCCTGGAGGTGCCCCACAGGGCCACG
 GTCTGGGCTAAGGATGGTACAGGTCTGGTGGCCTCCACCGCATCCTGGTGGGCGCTCAGAGGCTGCAAG
 TGCTAAATGCCTCCACGAAGATGCAGGGTCTACAGCTGCCAGCACCGGCTCACTCGGCGTGTGCTGTG
 CCCTTCACTGTGCGTGTAAACAGATGCTCCATCCTCAGGAGATGACGAAGATGGGAGGACGTGGCTGAA
 GACACAGGGGCTCCTTATTGGACTCGCCCGAGCGAATGGATAAGAACTGCTGGCTGTGCCAGCCGCAA
 AACTGTCCGCTCCGCTGCCAGCTGCTGGCAACCTACCCCTCCATCTCCTGGCTGAAGAATGGCAA
 AGAATCCGAGGGGAGCATCGCATTGGGGGCATCAAGCTCCGGCACCAGCAGTGGAGCTTGGTCATGGAA
 AGTGTGGTACCCTCCGATCGTGGCAACTATACCTGTGTAGTTGAGAACAAGTTTGGCAGCATCCGGCAGA
 CATAACACTGGATGTGCTGGAGCGCTCCACACCCGGCCATCCTGCAGGCTGGGCTGCCGGCCAACCA
 GACAGCCATTCTAGGCAGTGACGTGGAGTTCCTGCAAGGTGTACAGCGATGCACAGCCACACATCCAG
 TGGCTGAAGCAGCTGGAAGTGAACGGCAGCAAGGTGGGCCTGACGGCAGCCCTACGCTACTGTACTCA
 AGACTGCAGGGCGTAACACCACCGACAAGGAGCTAGAGGTTCTGTCTTGCAAAATGTCACCTTTGAGGA
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 CTGCCAGCTGAGGAGGAGCTGATGAAACTGATGAGGCTGGCAGCGTGTACGAGGCGTCCCTCAGCTACC
 GGTGGTCTTCTCCTTTCATCCTGCTGGTGGCAGCTGTGATACTCTGCCGCTGCGCAGTCCCCAAA
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 ACTTGGTAAGCCTCTTGGAGAAGGCTGCTTGGACAGGTGGTCAATGGCAGAAGCTATTGGCATCGACAAG
 GACCGTACTGCCAAGCCTGTACCGTGGCCGTGAAGATGCTGAAAGATGATGCGACTGACAAGGACCTGT
 CGGACCTGGTATCTGAGATGGAGATGATGAAAATGATTGGCAAGCACAAGAACATCATTAACTGCTGGG
 GCGTGCACACAGGTGGGCCCTGTATGTCTGGTGGAGTACGCAGCCAAGGGCAATCTCCGGGAGTTC
 CTTCCGGGCGGGCCCTCCAGGCATGGACTACTCTTTGATGCCTGCAGGCTGCCAGAGGAACAGCTCA
 CCTGCAAGGATCTAGTGTCTGTGCTACCAGGTGGCACGGGCATGGAATACTTGGCTTCTCAGAAGTG
 TATTACAGAGACTTGGCTGCCAGAAACGTCCTGGTGACCGAGGACAATGTGATGAAGATTGCGGACTTT
 GGCTGGCTCGAGATGTGCACAACCTGGACTACTACAAGAAGACCACAAATGGCCGGCTACCTGTGAAGT
 GGATGGCACCAGAGGCCCTTTTGGACCGAGTCTACACCCACAGAGTGTGTTGGTCTTTTGGTGTCTCT
 CCTCTGGGAGATCTTACGCTGGGGGCTACCGTATCCTGGCATCCAGTGGAAAGAGCTTTTCAAGCTG
 TTGAAAGAGGGCCACCGCATGGACAAGCCAGCCAGCTGCACACATGACCTGTACATGATCATGCGGGAAT
 GTTGGCATGCGGTGCCTTACAGAGGCCACCTTCAAGCAGTTGGTAGAGGATTTAGACCGCATCCTCAC
 TGTGACATCAACCGACGAGTACTTGGACCTCTCCGTGCCGTTTGGAGCAGTACTCGCCAGGTGGCCAGGAC
 ACGCCTAGCTCCAGCTCGTCCGGAGATGACTCGGTGTTACCCATGACCTGCTACCCCGAGTCCACCCA
 GTAACGGGGACCTCGGACG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG226914 representing NM_001163215
 Red=Cloning site Green=Tags(s)

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MVVPACVLVFCVAVVAGATSEPPGPEQRVVRRAAEVPGPEPSQQEQVAFGSGDTVELSCHPPGGAPTGPT
VWAKDGTGLVASHRILVGPQRLQVLNASHEDAGVYSCQHRLTRRVLCHF SVRVTDAPSSGDDEDGEDVAE
DTGAPYWTRPERMDKLLAVPAANTVFRFCPAAGNPTPSISWLKNGKEFRGEHRIGGIKLRHQWLSLME
SVVPSDRGNITCVVENKFGSIRQTYTLDVLESPHRPILQAGLPANQTALIGSDVEFHCKVYSDAQPHIQ
WLKHVEVNGSKVGPDPGTPYVTVLKTAGANTTDKELEVL SLHNVT FEDAGEYTCLAGNSIGF SHSAWL VV
LPAAEEELMETDEAGSVYAGVLSYGVVFFLFI L VVAAVILCRLRSPPKKGLGSPTVHKVSRFPLKRQVSLE
SNSSMNSNTPLVRIARLSSGEGPVLANVSELELPADPKWELSRTRLTLGKPLGEGCFQVVMMAEAI GIDK
DRTAKPVTVAVKMLKDDATDKDLSDLVSEMEMMKMIGKHKNIINLLGACTQGGPLYVVEYAAKGNLREF
LRARRPPGMDYSFDACRLPEEQLTCKDLVSCAYQVARGMEYLASQKCIHRDLAARNVLTEDNVMKIADF
GLARDVHNL DYYKTTNGRLPVKWM APEALFDRVYTHQSDVWVSGVLLWEIFTLGGSPYPGIPVEELFKL
LKEGHRMDKPASCTHDL YMIMRECWHAVPSQRPTFKQLVEDLDRILTVTSTDEYLDLSVPFEQYSPGGQD
TPSSSSSGDSDVFTHDLLPPGPPSNGGPRT
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TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



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                                     Kozac
                                     Consensus
                                     Sgf I   Asc I
          EcoR I   BamH I Kpn I   RBS   -----
CTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGSAGATCTGCCGCCGATCGCCGGCGCCAGATCT

          Hind III   Nhe I   Rsr II   Mlu I   Not I   Xho I   GFP Tag
CAAGCTTAACTAGCTAGCGGACCG   ACG CGT   ACG CGG   CCG CTC GAG   ATG GAG AGC GAC -----
                                     T   R   T   R   P   L   E   M   E   S   D   -   -   -

          Pme I   Fse I
          --- GAA GAA AGA GTT TAA ACGGCCGGCCGGGAGCT
           - - E E R V Stop
    
```

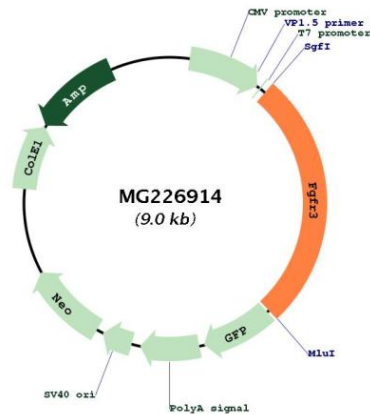
ACCN: NM_001163215

ORF Size: 2400 bp

OTI Disclaimer:	<p>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.</p> <p>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</p>
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_001163215.2, NP_001156687.1</u>
RefSeq Size:	4245 bp
RefSeq ORF:	2403 bp
Locus ID:	14184
Cytogenetics:	5 17.83 cM

Gene Summary:

This gene encodes a member of the fibroblast growth factor receptor family. Members of this family are highly conserved proteins that differ from one another in their ligand affinities and tissue distribution. A representative protein consists of an extracellular region composed of three immunoglobulin-like domains, a single hydrophobic membrane-spanning segment, and a cytoplasmic tyrosine kinase domain. The extracellular portion of the protein interacts with fibroblast growth factors, setting in motion a cascade of downstream signals, ultimately influencing mitogenesis and differentiation. This family member binds acidic and basic fibroblast growth hormone and plays a role in bone development and maintenance. Mutations in this gene may be associated with craniosynostosis and multiple types of skeletal dysplasia. A pseudogene of this gene is located on chromosome 1. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Apr 2011]

Product images:


Circular map for MG226914