

Product datasheet for **RC207434**

FGF1 (NM_000800) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: FGF1 (NM_000800) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: FGF1
Synonyms: AFGF; ECGF; ECGF-beta; ECGFA; ECGFB; FGF-1; FGF-alpha; FGFA; GLIO703; HBGF-1; HBGF1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC207434 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGGCTGAAGGGGAAATCACCACCTTCACAGCCCTGACCGAGAAGTTAATCTGCCTCCAGGAATTACA
AGAAGCCCAAACCTCTACTGTAGCAACGGGGCCACTTCTGAGGATCCTCCGGATGGCACAGTGGA
TGGGACAAGGGACAGGAGCGACCAGCACATTAGCTGCAGCTCAGTCCGAAAGCGTGGGGAGGTGTAT
ATAAAGAGTACCGAGACTGGCCAGTACTGGCCATGGACACCGACGGGCTTTTATACGGCTCACAGACAC
CAAATGAGGAATGTTTGTCTGAAAGGCTGGAGGAGAACCATTACAACACCTATATATCCAAGAAGCA
TGCAGAGAAGAATTGGTTTGTTCCTCAAGAAGATGGGAGCTCAAACGCGGTCTCGGACTCACTAT
GGCCAGAAAGCAATCTTGTCTCCCTGCCAGTCTCTCTGAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC207434 protein sequence
 Red=Cloning site Green=Tags(s)

MAEGEITFTALTEKFNLPNGYKPKLLYCSNGGHFLRILPDGTVDGTRDRSDQHIQLQLSAESVGEVY
IKSTETGQYLAMDTDGLLYGSQTPNEECLFLERLEENHYNTYISKKHAENWVGLKKNKSGCKRGRPTHY
GQKAILFLPLPVSSD

TRTRPLEQK**L**ISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6033_a05.zip



[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000800

ORF Size: 465 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_000800.5](#)

RefSeq Size: 4162 bp

RefSeq ORF: 468 bp

Locus ID: 2246

UniProt ID: [P05230](#)

Cytogenetics: 5q31.3

Domains: FGF

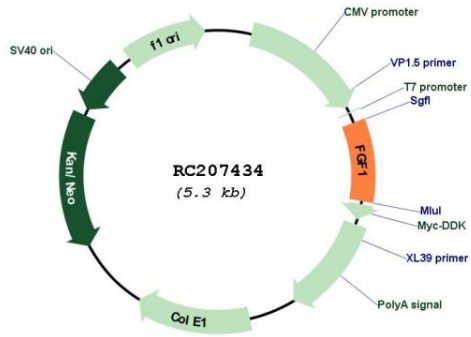
Protein Families: Druggable Genome, Secreted Protein

Protein Pathways: MAPK signaling pathway, Melanoma, Pathways in cancer, Regulation of actin cytoskeleton

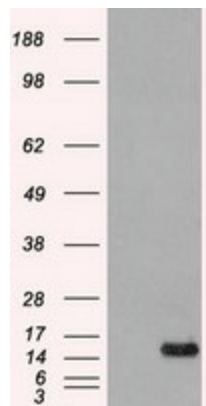
MW: 17.5 kDa

Gene Summary: The protein encoded by this gene is a member of the fibroblast growth factor (FGF) family. FGF family members possess broad mitogenic and cell survival activities, and are involved in a variety of biological processes, including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. This protein functions as a modifier of endothelial cell migration and proliferation, as well as an angiogenic factor. It acts as a mitogen for a variety of mesoderm- and neuroectoderm-derived cells in vitro, thus is thought to be involved in organogenesis. Multiple alternatively spliced variants encoding different isoforms have been described. [provided by RefSeq, Jan 2009]

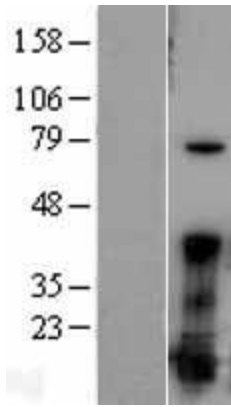
Product images:



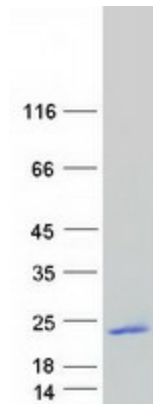
Circular map for RC207434



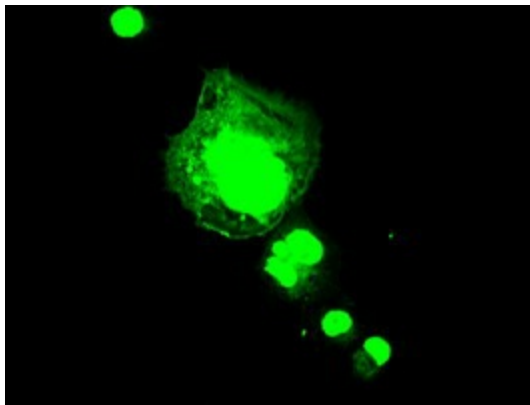
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY AFGF (Cat# RC207434, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-AFGF (Cat# [TA500064]). Positive lysates [LY400278] (100ug) and [LC400278] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY428588]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC227797] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FGF1 protein (Cat# [TP307434]). The protein was produced from HEK293T cells transfected with FGF1 cDNA clone (Cat# RC207434) using MegaTran 2.0 (Cat# [TT210002]).



Anti-AFGF mouse monoclonal antibody ([TA500064]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY AFGF (RC207434).