

## Product datasheet for **RG218442**

### FGF8 (NM\_033165) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** FGF8 (NM\_033165) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** FGF8  
**Synonyms:** AIGF; FGF-8; HBGf-8; HH6; KAL6  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG218442 representing NM\_033165  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGCAGCCCCGCTCCGCGCTGAGCTGCCTGCTGTTGCACTTGTGGTCTCTGCCTCCAAGCCAGC  
ATGTGAGGGAGCAGAGCCTGGTGACGGATCAGCTCAGCCGCCCTCATCCGGACCTACCAACTCTACAG  
CCGCACCAGCGGGAAGCACGTGCAGGTCTGGCCAACAAGCGCATCAACGCCATGGCAGAGGACGGCGAC  
CCCTTCGCAAAGCTCATCGTGGAGACGGACACCTTTGGAAGCAGAGTTCGAGTCCGAGGAGCCGAGACGG  
GCCTCTACATCTGCATGAACAAGAAGGGGAAGCTGATCGCCAAGAGCAACGGCAAAGGCAAGGACTGCGT  
CTTCACGGAGATTGTGCTGGAGAACAACACTACACAGCGCTGCAGAATGCCAAGTACGAGGGCTGGTACATG  
GCCTTCACCCGCAAGGGCCGGCCCGCAAGGGCTCCAAGACGCGGCAGCACCCAGCGTGGAGGCCCACTTCA  
TGAAGCGGCTGCCCGGGGCCACCACACCAGCAGAGCCTGCGCTTCGAGTTCCTCAACTACCCGCC  
CTTCACGCGCAGCCTGCGCGGCAGCCAGAGGACTTGGGCCCCGAGCCCCGA

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >RG218442 representing NM\_033165  
Red=Cloning site Green=Tags(s)

MGSPRSALSCLLLHLLVLCLQAQHVREQLVTDQLSRRLIRTYQLYSRTSGKHVQLANKRINAMAEDGD  
PFAKLIVETDTFGSRVVRGAETGLYICMKNKGLIAKSNGKGDVFTFTEIVLENNYTALQNAKYEYGYWY  
AFTRKGRPRKGSKTRQHQRHAHFMKRLPRGHHTTEQSLRFEFLNYPFFTRSLRGSQRTWAPEPR

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** SgfI-MluI



**Cloning Scheme:**


**ACCN:** NM\_033165

**ORF Size:** 612 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](mailto: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.

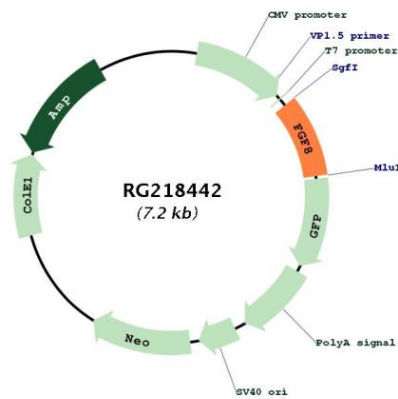
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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\\_033165.1](#), [NP\\_149355.1](#)

RefSeq Size:	987 bp
RefSeq ORF:	615 bp
Locus ID:	2253
UniProt ID:	<a href="#">P55075</a>
Cytogenetics:	10q24.32
Protein Families:	Druggable Genome, Secreted Protein
Protein Pathways:	MAPK signaling pathway, Melanoma, Pathways in cancer, Regulation of actin cytoskeleton
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 is known to be a factor that supports androgen and anchorage independent growth of mammary tumor cells. Overexpression of this gene has been shown to increase tumor growth and angiogenesis. The adult expression of this gene is restricted to testes and ovaries. Temporal and spatial pattern of this gene expression suggests its function as an embryonic epithelial factor. Studies of the mouse and chick homologs revealed roles in midbrain and limb development, organogenesis, embryo gastrulation and left-right axis determination. The alternative splicing of this gene results in four transcript variants. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RG218442