

# **Product datasheet for RG214620**

# FGF8 (NM\_006119) Human Tagged ORF Clone

## **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** FGF8 (NM\_006119) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: FGF8

Synonyms: AIGF; FGF-8; HBGF-8; HH6; KAL6

Mammalian Cell Neomycin

Selection:

**Vector:** pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG214620 representing NM\_006119

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

GCCCCGAGCCCCGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



**Protein Sequence:** >RG214620 representing NM\_006119

Red=Cloning site Green=Tags(s)

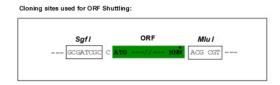
MGSPRSALSCLLLHLLVLCLQAQVTVQSSPNFTQHVREQSLVTDQLSRRLIRTYQLYSRTSGKHVQVLAN KRINAMAEDGDPFAKLIVETDTFGSRVRVRGAETGLYICMNKKGKLIAKSNGKGKDCVFTEIVLENNYTA LQNAKYEGWYMAFTRKGRPRKGSKTRQHQREVHFMKRLPRGHHTTEQSLRFEFLNYPPFTRSLRGSQRTW APEPR

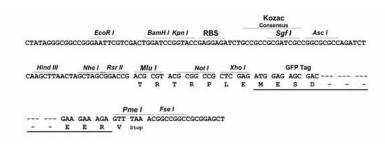
TRTRPLE - GFP Tag - V

**Restriction Sites:** 

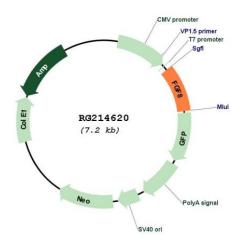
Sgfl-Mlul

**Cloning Scheme:** 





### Plasmid Map:



**ACCN:** NM\_006119

ORF Size: 645 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 <a href="mailto:customport@origene.com">customport@origene.com</a> 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. <u>More info</u>

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:** <u>NM 006119.6</u>

 RefSeq Size:
 1020 bp

 RefSeq ORF:
 648 bp

 Locus ID:
 2253

 UniProt ID:
 P55075

 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 angiogensis. 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]