

## Product datasheet for **RG224418**

### **KGF (FGF7) (NM\_002009) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** KGF (FGF7) (NM\_002009) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** KGF  
**Synonyms:** HBGF-7; KGF  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG224418 representing NM\_002009  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCACAAATGGATACTGACATGGATCCTGCCAACTTTGCTCTACAGATCATGCTTTCACATTATCTGTC  
 TAGTGGGTACTATATCTTTAGCTTGCAATGACATGACTCCAGAGCAAATGGCTACAAATGTGAAGTCTTC  
 CAGCCCTGAGCGACACACAAGAAGTTATGATTACATGGAAGGAGGGGATATAAGAGTGAGAAGACTCTTC  
 TGTCGAACACAGTGGTACCTGAGGATCGATAAAAAGAGGCAAAGTAAAAGGGACCCAAGAGATGAAGAATA  
 ATTACAATATCATGGAAATCAGGACAGTGGCAGTTGGAATTGTGGCAATCAAAGGGTGGAAAGTGAATT  
 CTATCTTGCAATGAACAAGGAAGGAAAACCTCTATGCAAAGAAAGAATGCAATGAAGATTGTAACCTCAA  
 GAACTAATTCTGGAAAACCATTAACAACACATATGCATCAGCTAAATGGACACACAACGGAGGGGAAATGT  
 TTGTTGCCTTAAATCAAAGGGGATTCCTGTAAGAGGAAAAAACAAGAAAGAACAAAAACAGCCCA  
 CTTTCTTCTATGGCAATAACT

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >RG224418 representing NM\_002009  
 Red=Cloning site Green=Tags(s)

MHKWILTWILPTLLYRSCFHIIICLVGTISLACNDMTPEQMATNVNCCSPERHTRSVDYMEGGDIRVRRFL  
 CRTQWYLRIDKRGKVKGTQEMKNNYIMEIRTVAVGIVAIGKVESEFYLAMNKEGKLYAKKECNEDCNFK  
 ELILENHYNITYASAKWTHNGGEMFVALNQGIPVRGKKTKEQKTAHFLPMAIT

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** SgfI-MluI



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**Cloning Scheme:**


**ACCN:** NM\_002009

**ORF Size:** 582 bp

**OTI Disclaimer:** 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\\_002009.4](#)

**RefSeq Size:** 3853 bp

**RefSeq ORF:** 585 bp

**Locus ID:** 2252

**UniProt ID:** [P21781](#)

**Cytogenetics:** 15q21.2

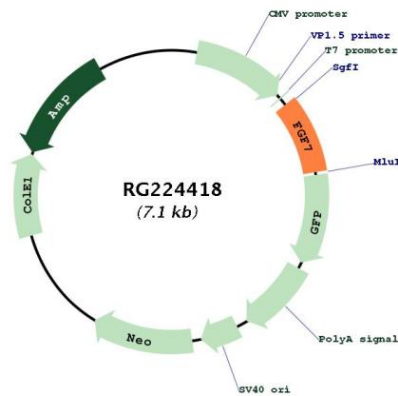
**Domains:** FGF

**Protein Families:** Adult stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS, 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 a potent epithelial cell-specific growth factor, whose mitogenic activity is predominantly exhibited in keratinocytes but not in fibroblasts and endothelial cells. Studies of mouse and rat homologs of this gene implicated roles in morphogenesis of epithelium, reepithelialization of wounds, hair development and early lung organogenesis. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RG224418