

Product datasheet for **RC214516**

FGF8 (NM_033163) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FGF8 (NM_033163) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FGF8
Synonyms:	AIGF; FGF-8; HBGF-8; HH6; KAL6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC214516 representing NM_033163 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCAGCCCCGCTCCGCGCTGAGCTGCCTGCTGTTGCACTTGTGGTCTCTGCCTCCAAGCCAGG
AAGGCCCGGGCAGGGCCCTGCGCTGGGCAGGGAGCTCGTTCCCTGTTCCGGGCTGGCCGGGAGCCCCA
GGGTGTCTCCCAACAGGTAAGTGTTCAGTCCTCACCTAATTTTACACAGCATGTGAGGGAGCAGAGCCTG
GTGACGGATCAGCTCAGCCGCCCTCATCCGGACCTACCAACTTACAGCCGACCAGCGGGAAGCAGC
TGCAGGTCTGGCAACAAGCGCATCAACGCCATGGCAGAGGACGGCGACCCCTTCGCAAAGCTCATCGT
GGAGACGGACACCTTTGGAAGCAGAGTTCGAGTCCGAGGAGCCGAGACGGCCCTTACATCTGCATGAAC
AAGAAGGGGAAGCTGATCGCAAGAGCAACGGCAAGGCAAGGACTGCGTCTTCACGGAGATTGTGCTGG
AGAACAATACACAGCGCTGCAGAAAGTACGAGGGCTGGTACATGGCCTTCACCCGCAAGGGCCG
GCCCCGCAAGGGCTCCAAGACGGCGCAGCACCAGCGTGAGGTCCACTTCATGAAGCGGCTGCCCCGGGGC
CACCACACCAGCAGAGCCTGCGCTTCGAGTTCCTCAACTACCCGCCCTTCACGCGCAGCCTGCGCG
GCAGCCAGAGGACTTGGGCCCCGAGCCCCGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC214516 representing NM_033163
Red=Cloning site Green=Tags(s)

MGSPRSALSCLLLHLLVLCLQAQEGPGRGPALGRELASLFRAGREPQGVSSQVTVQSSPNFTQHVREQSL
 VTDQLSRRLIRTYQLYSRTSGKHVQVLANKRINAMAEDGDPF AKLIVETDTFGSRVVRVGAETGLYICMN
 KKGKLIASNGKGDVCFTEIVLENNYALQNAKYEGWYMAFTRKGRPRKGSKTRQHQRVHFMKRLPRG
 HHTTEQSLRFEFLNYPPFTRSLRGSQRTWAPEPR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2997_e07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_033163

ORF Size: 732 bp

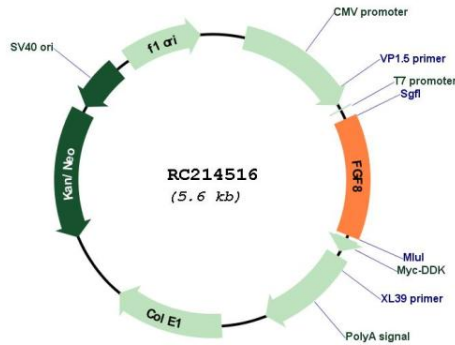
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

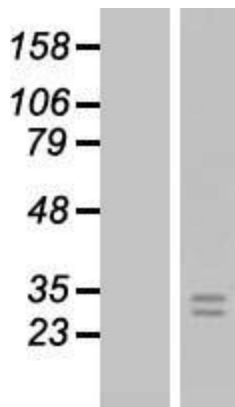
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_033163.5
RefSeq Size:	1107 bp
RefSeq ORF:	735 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
MW:	25.3 kDa
Gene Summary:	<p>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]</p>

Product images:



Circular map for RC214516



Western blot validation of overexpression lysate (Cat# [LY409684]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214516 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).