

## Product datasheet for **RC204538**

### FGF21 (NM\_019113) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** FGF21 (NM\_019113) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** FGF21  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC204538 representing NM\_019113  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGCATCGCC**

ATGGACTCGGACGAGACCGGGTTCGAGCACTCAGGGCTGTGGGTTTCTGTGCTGGCTGGTCTTCTGCTGG  
GAGCCTGCCAGGCACACCCCATCCCTGACTCCAGTCTCTCTGCAATTCGGGGGCCAAGTCCGGCAGCG  
GTACCTCTACACAGATGATGCCAGCAGACAGAAGCCACCTGGAGATCAGGGAGGATGGGACGGTGGGG  
GGCGTGCTGACCAGAGCCCCGAAAGTCTCCTGCAGCTGAAAGCCTTGAAGCCGGGAGTTATTCAAATCT  
TGGGAGTCAAGACATCCAGGTTCTGTGCCAGCGGCCAGATGGGGCCCTGTATGGATCGCTCCACTTTGA  
CCCTGAGGCCTGCAGCTTCCGGGAGCTGCTTCTTGAGGACGGATACAATGTTTACCAGTCCGAAGCCAC  
GGCCTCCCGCTGCACCTGCCAGGGAACAAGTCCCCACACCGGGACCTGCACCCCGAGGACCAGCTCGCT  
TCCTGCCACTACCAGGCCTGCCCCCGCACCCCGGAGCCACCCGGAATCCTGGCCCCCAGCCCCCGA  
TGTGGGCTCCTCGGACCCTCTGAGCATGGTGGGACCTTCCAGGGCCGAAGCCCCAGCTACGCTTCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC204538 representing NM\_019113  
Red=Cloning site Green=Tags(s)

MDSDETGFHSLWVSVLAGLLLGACQAHPIPDSSPLLQFGGQVRQRYLYTDDAQQTEAHLEIREDGTVG  
GAADQSPESLLQLKALKPGVIQILGVKTSRFLCQRPDGLYGLHFDPEACSFRELLLEDGYNVYQSEAH  
GLPLHLPGNKSPHRDPAPRGPAPFLPLPLPPAPPEPPGILAPQPPDVGSDDLPMVGPSSQGRSPSYAS

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

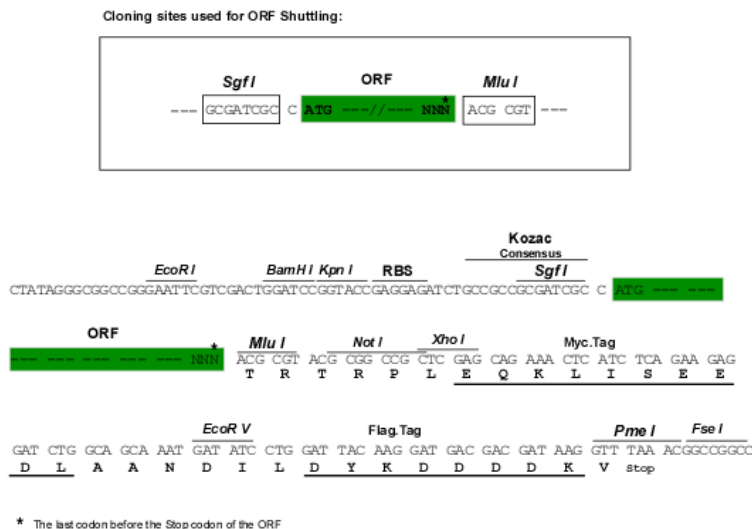
**Chromatograms:** [https://cdn.origene.com/chromatograms/mg2899\\_c02.zip](https://cdn.origene.com/chromatograms/mg2899_c02.zip)



[View online »](#)

Restriction Sites: Sgfl-MluI

### Cloning Scheme:



ACCN: NM\_019113

ORF Size: 627 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.

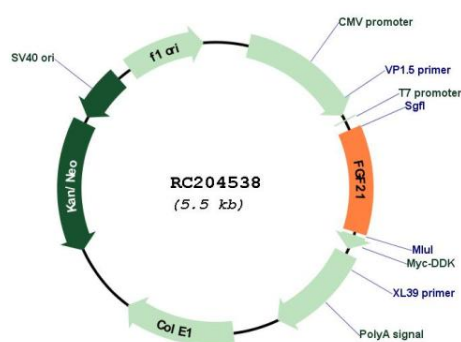
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in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

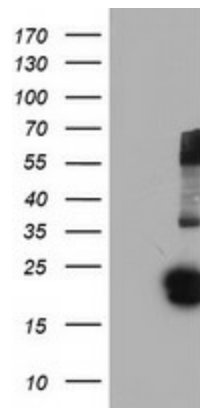
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u>NM_019113.4</u>
<b>RefSeq Size:</b>	940 bp
<b>RefSeq ORF:</b>	630 bp
<b>Locus ID:</b>	26291
<b>UniProt ID:</b>	<u>Q9NSA1</u>
<b>Cytogenetics:</b>	19q13.33
<b>Protein Families:</b>	Adult stem cells, Embryonic stem cells, ES Cell Differentiation/IPS, Secreted Protein
<b>Protein Pathways:</b>	MAPK signaling pathway, Melanoma, Pathways in cancer, Regulation of actin cytoskeleton
<b>MW:</b>	19.4 kDa
<b>Gene Summary:</b>	<p>This gene encodes 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. This protein is a secreted endocrine factor that functions as a major metabolic regulator. The encoded protein stimulates the uptake of glucose in adipose tissue. [provided by RefSeq, Mar 2016]</p>

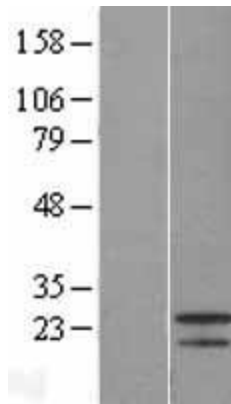
## Product images:



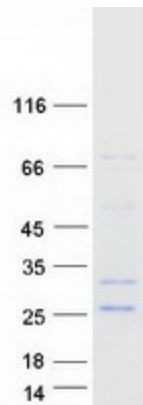
Circular map for RC204538



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY FGF21 (Cat# RC204538, 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-FGF21 (Cat# [TA502772]). Positive lysates [LY412740] (100ug) and [LC412740] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY412740]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204538 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FGF21 protein (Cat# [TP304538]). The protein was produced from HEK293T cells transfected with FGF21 cDNA clone (Cat# RC204538) using MegaTran 2.0 (Cat# [TT210002]).