

Product datasheet for RC212527

IGF1 (NM_000618) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: IGF1 (NM_000618) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: IGF1
Synonyms: IGF; IGF-I; IGFII; MGF
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC212527 representing NM_000618
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGAAAAATCAGCAGTCTTCCAACCAATTATTTAAGTGCTGCTTTTGTGATTTCTTGAAGGTGAAGA
 TGCACACCATGCTCCTCCTCGCATCTCTTCTACCTGGCGCTGTGCCTGCTCACCTTACCAGCTCTGCCAC
 GGCTGGACCGGAGACGCTCTGCGGGGCTGAGCTGGTGGATGCTCTTCAGTTCGTGTGTGGAGACAGGGGC
 TTTTATTTCAACAAGCCACAGGGTATGGCTCCAGCAGTCGGAGGGCGCCTCAGACAGGCATCGTGGATG
 AGTGCTGCTTCCGGAGCTGTGATCTAAGGAGGCTGGAGATGTATTGCGCACCCCTCAAGCCTGCCAAGTC
 AGCTCGCTCTGTCCGTGCCAGCCAGCCACACCGACATGCCCAAGACCCAGAAGGAAGTACATTTGAAGAAC
 GCAAGTAGAGGGAGTGCAGGAAACAAGAACTACAGGATG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC212527 representing NM_000618
 Red=Cloning site Green=Tags(s)

MGKISSLPTQLFKCCFDFLKVKMHTMSSSHLFYALCLLLTFTSSATAGPETLCGAELVDALQFVCGDRG
 FYFNKPTGYGSSRRAPQTGIVDECCFRSCDLRRLREMYCAPLKPAKSARSVRAQRHTDMPKTKQVEVHLKN
 ASRGSAGNKNYRM

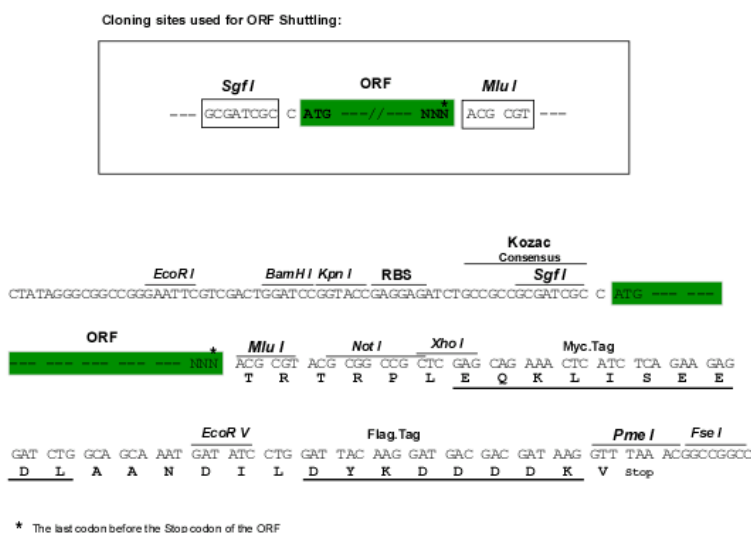
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6047_d07.zip



[View online >](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:

ACCN: NM_000618

ORF Size: 459 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.

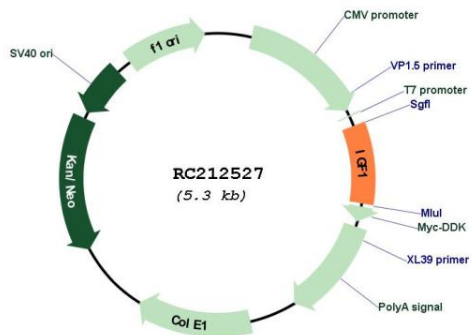
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_000618.5](#)
RefSeq Size: 7260 bp

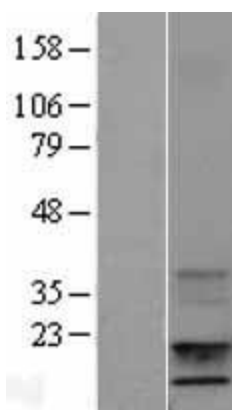
RefSeq ORF: 462 bp

Locus ID: 3479
UniProt ID: [P05019](#)
Cytogenetics: 12q23.2
Domains: IIGF
Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Secreted Protein
Protein Pathways: Dilated cardiomyopathy, Focal adhesion, Glioma, Hypertrophic cardiomyopathy (HCM), Long-term depression, Melanoma, mTOR signaling pathway, Oocyte meiosis, p53 signaling pathway, Pathways in cancer, Progesterone-mediated oocyte maturation, Prostate cancer
MW: 17.03 kDa
Gene Summary: The protein encoded by this gene is similar to insulin in function and structure and is a member of a family of proteins involved in mediating growth and development. The encoded protein is processed from a precursor, bound by a specific receptor, and secreted. Defects in this gene are a cause of insulin-like growth factor I deficiency. Alternative splicing results in multiple transcript variants encoding different isoforms that may undergo similar processing to generate mature protein. [provided by RefSeq, Sep 2015]

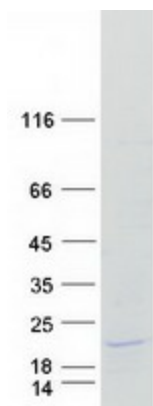
Product images:



Circular map for RC212527



Western blot validation of overexpression lysate (Cat# [LY400206]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212527 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified IGF1 protein (Cat# [TP312527]). The protein was produced from HEK293T cells transfected with IGF1 cDNA clone (Cat# RC212527) using MegaTran 2.0 (Cat# [TT210002]).