

## Product datasheet for **RC225144**

### IGF1 (NM\_00111283) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** IGF1 (NM\_00111283) 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:** >RC225144 representing NM\_00111283  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGGAAAAATCAGCAGTCTTCCAACCAATTATTTAAGTGCTGCTTTTGTGATTTCTTGAAGGTGAAGA  
TGCACACCATGTCCTCCTCGCATCTCTTCTACCTGGCGCTGTGCCTGCTCACCTTACCAGCTCTGCCAC  
GGCTGGACCGGAGACGCTCTGCGGGGCTGAGCTGGTGGATGCTCTTCAGTTCGTGTGTGGAGACAGGGC  
TTTTATTTCAACAAGCCACAGGGTATGGCTCCAGCAGTCGGAGGGCGCCTCAGACAGGCATCGTGGATG  
AGTGCTGCTTCCGGAGCTGTGATCTAAGGAGGCTGGAGATGTATTGCGCACCCCTCAAGCCTGCCAAGTC  
AGCTCGCTCTGTCCGTGCCAGCCACACCGACATGCCCAAGACCCAGAAGTATCAGCCCCATCTACC  
AACAAGAACACGAAGTCTCAGAGAAGGAAAGGAAGTACATTTGAAGAACGCAAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC225144 representing NM\_00111283  
**Red=Cloning site Green=Tags(s)**

MGISSLPTQLFKCCFDLKVVMHTMSSSHLFYLALCLLLTFTSSATAGPETLCGAELVDALQFVCGDRG  
FYFNKPTGYGSSRRAPQTGIVDECCFRSCDLRRLREMYCAPLKPAKSARSVRAQRHTDMPKTQKYQPPST  
NKNTKSQRRKGSTFEERK

**TR**TRPLEQK**L**ISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg3802\\_b01.zip](https://cdn.origene.com/chromatograms/mg3802_b01.zip)



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Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_001111283

ORF Size: 474 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\\_001111283.3](#)

RefSeq ORF: 477 bp

Locus ID: 3479

Cytogenetics: 12q23.2

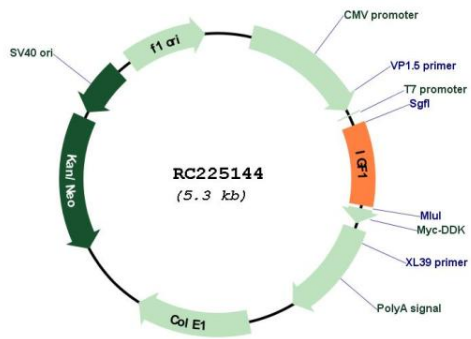
**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS, Secreted Protein

**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

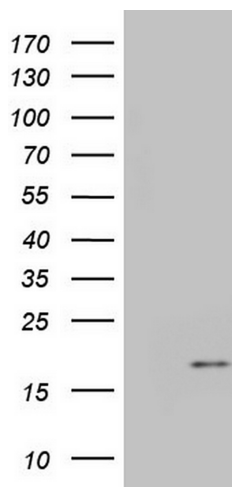
**MW:** 17.76 kDa

**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]

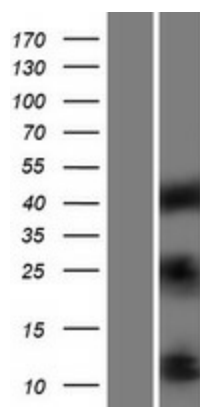
**Product images:**



Circular map for RC225144



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY IGF1 (Cat# RC225144, 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-IGF1 (Cat# [TA805748]). Positive lysates [LY426358] (100ug) and [LC426358] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY426358]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC225144 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).