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Product datasheet for SC318794

IGF1 (NM_001111285) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IGF1 (NM_001111285) Human Untagged Clone
Tag:	Tag Free
Symbol:	IGF1
Synonyms:	IGF; IGF-I; IGFI; MGF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC318794 representing NM_001111285. Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGGAAAAATCAGCAGTCTTCCAACCCAATTATTTAAGTGCTGCTTTTGTGATTTCTTGAAGGTGAAG
ATGCACACCATGTCCTCCTCGCATCTCTTCTACCTGGCGCTGTGCCTGCTCACCTTCACCAGCTCTGCC
ACGGCTGGACCGGAGACGCTCTGCGGGGCTGAGCTGGTGGATGCTCTTCAGTTCGTGTGTGGAGACAGG
GGCTTTTATTTCAACAAGCCCACAGGGTATGGCTCCAGCAGTCGGAGGGCGCCTCAGACAGGCATCGTG
GATGAGTGCTGCTTCCGGAGCTGTGATCTAAGGAGGCTGGAGATGTATTGCGCACCCCTCAAGCCTGCC
AAGTCAGCTCGCTCTGTCCGTGCCCAGCGCCACACCGACATGCCCAAGACCCAGAAGTATCAGCCCCCA
TCTACCAACAAGAACACGAAGTCTCAGAGAAGGAAAGGTTGGCCAAAGACACATCCAGGAGGGGAACAG
AAGGAGGGGACAGAAGCAAGTCTGCAGATCAGAGGAAAGAAGAAAGAGCAGAGGAGGGAGATTGGAAGT
AGAAATGCTGAATGCAGAGGCAAAAAAGGAAAATGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites:	SgfI-MluI
ACCN:	NM_001111285
Insert Size:	588 bp

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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 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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_001111285.1
RefSeq Size:	949 bp
RefSeq ORF:	588 bp
Locus ID:	3479
UniProt ID:	P05019
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:	21.8 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]

Transcript Variant: This variant (3) differs in the 3' coding region and 3' UTR, compared to variant 1, resulting in a protein (isoform 3) with a novel C-terminus, compared to isoform 1. This isoform is also known as IB. Sequence Note: This RefSeq was created from transcript and genomic sequence because transcript sequence consistent with the reference assembly was not available for all regions of the RefSeq transcript. The extent of this transcript is supported by transcript alignments.