

## Product datasheet for **MR201616**

### Igf2 (NM\_001122737) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Igf2 (NM\_001122737) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Igf2  
**Synonyms:** AL033362; Igf; Igf-; Igf-2; Igf-II; M; M6; M6pr; Mpr; Peg; Peg2  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR201616 representing NM\_001122737  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGGGATCCCAGTGGGAAGTCGATGTTGGTGCTTCTCATCTCTTTGGCCTTCGCCTTGTGCTGCATCG  
CTGCTTACGGCCCCGAGAGACTCTGTGCGGAGGGGAGCTTGTGACACGCTTCAGTTTGTCTGTTCCGA  
CCGCGGCTTCTACTTCAGCAGGCCTTCAAGCCGTGCCAACCGTCGCAGCCGTGGCATCGTGAAGAGTGC  
TGCTTCCGACGTGCGACCTGGCCCTCCTGGAGACATACTGTGCCACCCCGCCAAGTCCGAGAGGGACG  
TGCTACTCTCAGGCCGTACTTCCGGACGACTCCCCAGATACCCCGTGGGCAAGTTCTTCCAATATGA  
CACCTGGAGACAGTCCGCGGGACGCTGCGCAGAGGCCTGCCTGCCCTCCTGCGTGCCCGCGGGGTGCG  
ATGCTTGCCAAAGAGCTCAAAGAGTTCAAGAGGCCAAACGTCATCGTCCCTGATCGTGTACCACCCA  
AAGACCCCGCCACGGGGGAGCCTCTTCGGAGATGTCCAGCAACCATCAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR201616 representing NM\_001122737  
Red=Cloning site Green=Tags(s)

MGIPVGKSMVLVLLISLAFALCCIAAYGPGETLGGELVDTLQFVCSDRGFYFSRPSSRANRRSRGIVEEC  
CFRSCDLALLETYCATPAKSERDVSTSQAVLPDDFPRYPVGKFFQYDTRQSAGRLRRLPALLRARRGR  
MLAKELKEFREAKRHRPLIVLPPKDPAHGGASSEMSNHQ

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** Sgfl-MluI



**Cloning Scheme:**


**ACCN:** NM\_001122737

**ORF Size:** 540 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).

**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\\_001122737.2](#), [NP\\_001116209.1](#)

RefSeq Size: 3691 bp

RefSeq ORF: 543 bp

Locus ID: 16002

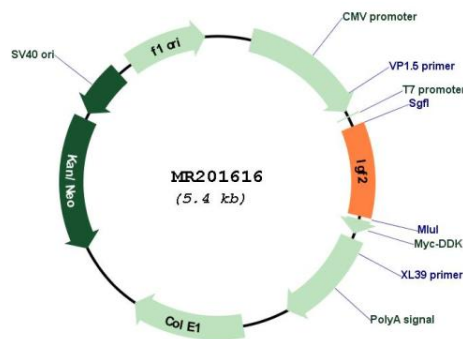
UniProt ID: [P09535](#)

Cytogenetics: 7 87.99 cM

MW: 20.5 kDa

**Gene Summary:** This gene encodes a member of the insulin-like growth factor (IGF) family of proteins that promote growth and development during fetal and postnatal life. It is an imprinted gene that is expressed only from the paternal allele. The encoded protein undergoes proteolytic processing to generate a mature peptide. The transgenic overexpression of this gene in mice results in prenatal overgrowth, polyhydramnios, fetal and neonatal lethality, disproportionate organ overgrowth including tongue enlargement, and skeletal abnormalities. Mice lacking the encoded protein exhibit growth deficiency. Alternative splicing results in multiple transcript variants encoding different isoforms that may undergo similar processing to generate mature protein. [provided by RefSeq, Oct 2015]

**Product images:**



Circular map for MR201616