

## Product datasheet for **MG201616**

### Igf2 (BC058615) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Igf2 (BC058615) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Igf2  
**Synonyms:** Igf-II, Mpr, M6pr, Peg2  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG201616 representing BC058615  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGGGATCCCAGTGGGGAAGTCGATGTTGGTGCTTCTCATCTCTTTGGCCTTCGCCTTGTGCTGCATCG  
 CTGCTTACGGCCCCGAGAGACTCTGTGCGGAGGGGAGCTTGTGACACGCTTCAGTTTGTCTGTTTCGGA  
 CCGCGGCTTCTACTTCAGCAGGCCTTCAAGCCGTGCCAACCGTCGCAGCCGTGGCATCGTGAAGAGTGC  
 TGCTTCCGACGTGCGACCTGGCCCTCCTGGAGACATACTGTGCCACCCCGCCAAGTCCGAGAGGGACG  
 TGCTACCTCTCAGGCCGTACTTCCGGACGACTCCCCAGATACCCCGTGGGCAAGTTCTTCCAATATGA  
 CACCTGGAGACAGTCCCGGGACGCTGCGCAGAGGCCTGCCTGCCCTCCTGCGTGCCCGCGGGGTGCG  
 ATGCTTGCCAAAGAGCTCAAAGAGTTCAAGAGGCCAAACGTCATCGTCCCTGATCGTGTACCACCCA  
 AAGACCCCGCCACGGGGGAGCCTCTTCGGAGATGTCCAGCAACCATCAG

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >MG201616 representing BC058615  
 Red=Cloning site Green=Tags(s)

MGIPVGKSMVLVLLISLAFALCCIAAYGPGETLCGGELVDTLQFVCSDRGFYFSRPSSRANRRSRGIVEEC  
 CFRSCDLALLETYCATPAKSERDVSTSQAVLPDDFPRYPVGKFFQYDTWRQSAGRLRRLPALLRARRGR  
 MLAKELKEFREAKRHRPLIVLPPKPAHGGASSEMSNHQ

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** SgfI-MluI



**Cloning Scheme:**


**ACCN:** BC058615

**ORF Size:** 542 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.

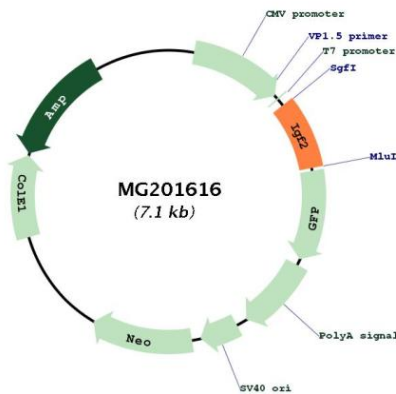
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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:** [BC058615](#), [AAH58615](#)  
**RefSeq Size:** 2554 bp  
**RefSeq ORF:** 542 bp  
**Locus ID:** 16002  
**Cytogenetics:** 7 87.99 cM

**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 MG201616