

Product datasheet for MR201606

Igf2 (BC053489) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Igf2 (BC053489) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Igf2
Synonyms: Igf-II, Mpr, M6pr, Peg2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR201606 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGGATCCCAGTGGGAAGTCGATGTTGGTGCTTCTCATCTCTTTGGCCTTCGCCTTGTGCTGCATCG
 CTGCTTACGGCCCCGAGAGACTCTGTGCGGAGGGGAGCTTGTGACACGCTTCAGTTTGTCTGTTCCGGA
 CCGCGGCTTCTACTTCAGCAGGCCTTCAAGCCGTGCCAACCGTCGCAGCCGTGGCATCGTGAAGAGTGC
 TGCTTCCGCAGCTGCGACCTGGCCCTCCTGGAGACATACTGTGCCACCCCGCCAAGTCCGAGAGGGACG
 TGCTACTCTCAGGCCGTACTTCCGGACGACTCCCCAGATACCCCGTGGGCAAGTTCTTCCAATATGA
 CACCTGGAGACAGTCCCGGGGACGCTGCGCAGAGGCCTGCCTGCCCTCCTGCGTGCCCGCGGGGTGCG
 ATGCTTGCCAAAGAGCTCAAAGAGTTTCAAGAGGCCAAACGTCATCGTCCCTGATCGTGTACCACCCA
 AAGACCCCGCCACGGGGGAGCCTCTTCGGAGATGTCCAGCAACCATCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR201606 protein sequence
 Red=Cloning site Green=Tags(s)

MGIPVGKSMVLVLLISLAFALCCIAAYGPGETLGGELVDTLQFVCSDRGFYFSRPSSRANRRSRGIVEEC
 CFRSCDLALLETYCATPAKSERDVSTSQAVLPDDFPRYPVGFQFFQYDTRQSAGRLRRLPALLRARRGR
 MLAKELKEFREAKRHRPLIVLPPKDPAHGGASSEMSNHQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI



Cloning Scheme:

ACCN:

BC053489

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 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:

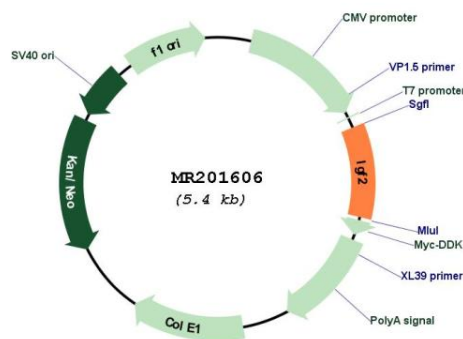
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store 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:
[BC053489](#), [AAH53489](#)

RefSeq Size: 1532 bp
RefSeq ORF: 542 bp
Locus ID: 16002
Cytogenetics: 7 87.99 cM
MW: 20 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 MR201606