

Product datasheet for MG200792

Id2 (NM_010496) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Id2 (NM_010496) Mouse Tagged ORF Clone

Tag: TurboGFP

Symbol: Id2

Synonyms: Al255428; bHLHb26; C78922; ldb2

Mammalian Cell Nec

Selection:

Neomycin

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >MG200792 representing NM_010496

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGAAAGCCTTCAGTCCGGTGAGGTCCGTTAGGAAAAACAGCCTGTCGGACCACAGCTTGGGCATCTCCCGGAGCAAAACCCCGGTGGACCACGCTCGTCTCTACAACATGAACGACTGCTACTCCAAGCTCAAGACTGGTGCCCAGCATCCCCAGAACAAGAAGGTGACCAAGATCGGAAATCCTGCAGCACGTCATCGATTACATCTTGGACCTGCAGATCGCCTGGACTCGCATCCCACTATCGTCAGCCTGCATCACCAGAGACCTGGACAGAACCAGGACCATCACCAGGACCATCCTGAACACACGGACATCAGCATCCTTGCAGGC

ATCTGAATTCCCTTCTGAGCTTATGTCGAATGATAGCAAAGTACTCTGTGGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG200792 representing NM_010496

Red=Cloning site Green=Tags(s)

MKAFSPVRSVRKNSLSDHSLGISRSKTPVDDPMSLLYNMNDCYSKLKELVPSIPQNKKVTKMEILQHVID

YILDLQIALDSHPTIVSLHHQRPGQNQASRTPLTTLNTDISILSLQASEFPSELMSNDSKVLCG

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-Mlul



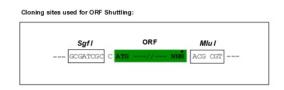
OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

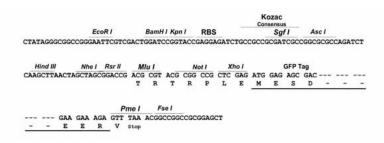
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com

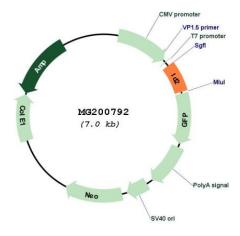


Cloning Scheme:





Plasmid Map:



ACCN: NM_010496

ORF Size: 402 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: <u>NM 010496.3</u>, <u>NP 034626.1</u>

 RefSeq Size:
 1280 bp

 RefSeq ORF:
 405 bp

 Locus ID:
 15902

 UniProt ID:
 P41136

 Cytogenetics:
 12 8.57 cM

Gene Summary: Transcriptional regulator (lacking a basic DNA binding domain) which negatively regulates the

basic helix-loop-helix (bHLH) transcription factors by forming heterodimers and inhibiting their DNA binding and transcriptional activity. Implicated in regulating a variety of cellular processes, including cellular growth, senescence, differentiation, apoptosis, angiogenesis, and neoplastic transformation. Inhibits skeletal muscle and cardiac myocyte differentiation. Regulates the circadian clock by repressing the transcriptional activator activity of the CLOCK-ARNTL/BMAL1 heterodimer. Restricts the CLOCK and ARNTL/BMAL1 localization to the cytoplasm. Plays a role in both the input and output pathways of the circadian clock: in the input component, is involved in modulating the magnitude of photic entrainment and in the output component, contributes to the regulation of a variety of liver clock-controlled genes

involved in lipid metabolism.[UniProtKB/Swiss-Prot Function]