

Product datasheet for **RG209651**

MAD4 (MXD4) (NM_006454) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: MAD4 (MXD4) (NM_006454) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: MAD4
Synonyms: bHLHc12; MAD4; MST149; MSTP149
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG209651 representing NM_006454
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGCTGAACCTCCTGCTGATCCTGCTGGAGGCGGCCGAGTACCTGGAGCGCAGGGATCGAGAGGCCG
AGCACGGCTACGCTCGGTGCTGCCCTTCGACGGCGACTTCGCCAGGGAGAAAACAAGGCGGCCGCGCT
GGTGCGAAGGCCCGAACAACAGGTCTTCACACAACGAGCTAGAAAAGCACAGACGAGCCAAACTCAGG
CTGTACCTTGAGCAGCTCAAGCAACTGGTGCCCTGGGCCCGACAGCACCCGCCACACCAGCTGAGCC
TCCTGAAGCGGGCAAGGTGCACATCAAGAAACTGGAGGAGCAGGACCGCCGGGCACTGAGCATCAAGGA
GCAGCTGCAGCAGGAGCATCGTTTCCTGAAGCGGCGCCTGGAGCAGCTGTGGTGCAGAGCGTGGAGCGC
GTGGCAGCAGATAGCACGGGCTCTGCTGTCTCCACGGACGACTCAGAGCAAGAAGTGGACATAGAGGGCA
TGGAGTTTGGCCCTGGTGGAGCTGGACAGTGTGGCAGCAGCAGTACCGGACGACCACTACAGCCTGCA
GAGTGGCACCGGCGGCGACAGTGGCTTCGGGCCCACTGCCGGCGGCTGGGCCGCCCGCCCTCTCG

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

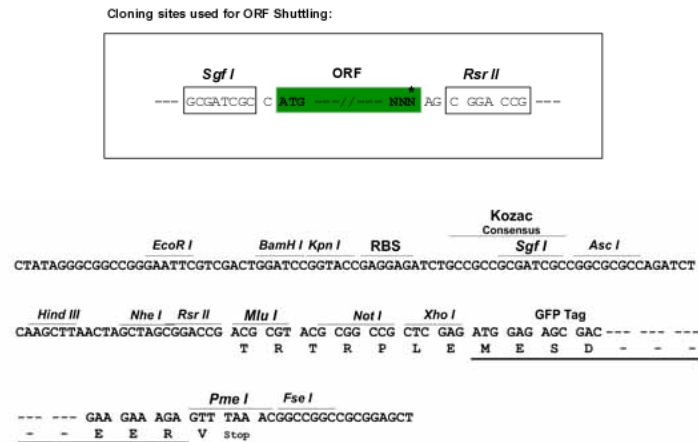
Protein Sequence: >RG209651 representing NM_006454
Red=Cloning site Green=Tags(s)

MELNSLLILLEAAEYLERRDREAHEGYASVLPFDGDFAREKTKAAGLVRKAPNNRSSHNELEKHRRAKLR
LYLEQLKQLVPLGPDSTRHTTLLSLLKRAKVHIKKLEEQDRRALSIKEQLQQEHRFLKRRLEQLSVQSVR
VRTDSTGSAVSTDDSEQEVDIEGMEFGPGELDSVGSSSDADDHYSLSQSGTGGDSGFGPHCRRLGRPALS

SGP**TRRRLE** - GFP Tag - V

Restriction Sites: Sgfl-RsrII



Cloning Scheme:


ACCN: NM_006454

ORF Size: 627 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: [NM_006454.3](#)

RefSeq Size: 3773 bp

RefSeq ORF: 630 bp

Locus ID: 10608

UniProt ID: [Q14582](#)

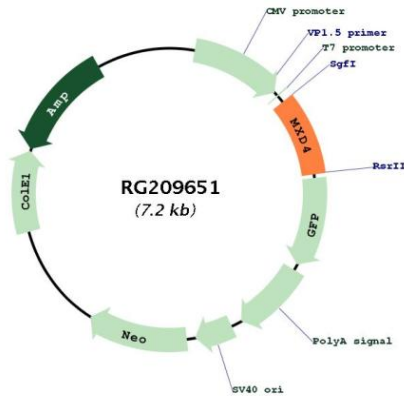
Cytogenetics: 4p16.3

Domains: HLH

Protein Families: Druggable Genome, Transcription Factors

Gene Summary: This gene is a member of the MAD gene family . The MAD genes encode basic helix-loop-helix-leucine zipper proteins that heterodimerize with MAX protein, forming a transcriptional repression complex. The MAD proteins compete for MAX binding with MYC, which heterodimerizes with MAX forming a transcriptional activation complex. Studies in rodents suggest that the MAD genes are tumor suppressors and contribute to the regulation of cell growth in differentiating tissues. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG209651