

Product datasheet for **RC210520**

Mad (MXD1) (NM_002357) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mad (MXD1) (NM_002357) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mad
Synonyms:	BHLHC58; MAD; MAD1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC210520 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGCGGGGTTCCGGATGAACATCCAGATGCTGCTGGAGGCGGCCGACTATCTGGAGCGGGGAGA
GAGAAGCTGAACATGGTTATGCCTCCATGTTACCATAACAATAACAAGGACAGAGATGCCTTAAACGGAG
GAACAAATCCAAAAGAATAACAGCAGTAGCAGATCAACTCACAATGAAATGGAGAAGAATAGACGGGCT
CATCTTCGCTTGTGCCTGGAGAAGTTGAAGGGGCTGGTCCACTTGGACCCGAATCAAGTCGACACACTA
CGTTGAGTTTATTAACAAAAGCCAAATTGCACATAAAGAACTTGAAGATTGTGACAGAAAAGCCGTTCA
CCAAATCGACCAGCTTCAGCGAGAGCAGCGACACCTGAAGAGGCAGCTGGAGAAGCTGGGCATTGAGAGG
ATCCGGATGGACAGCATCGGCTCCACCGTCTCCTCGGAGCGCTCCGACTCCGACAGGGAAGAAATCGACG
TTGACGTGGAGAGCAGGACTATCTCACAGGTGATCTGGACTGGAGCAGCAGCAGTGTGAGCGACTCTGA
CGAGCGGGGCGAGCATGCAGAGCCTCGGCAGTGATGAGGGCTATTCAGCACCAGCATCAAGAGAATAAAG
CTGCAGGACAGTCACAAGGCGTGTCTTGGTCTC

ACGCGTACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC210520 protein sequence
Red=Cloning site Green=Tags(s)

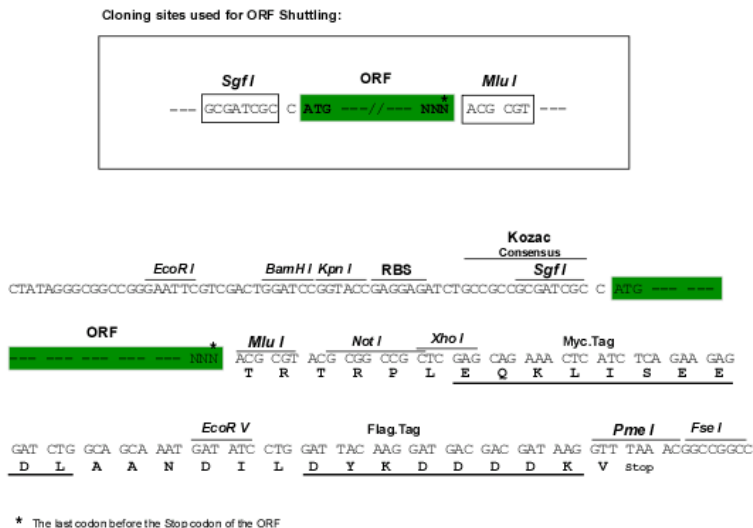
MAAAVRMNIQMLLEAADYLERREREAEHGYASMLPYNNKDRDALKRRNKS SKNNSSSRSTHNEMEKNRRA
 HLRLCLELKGKGLVPLGPESRHTTLLSLTKAKLHIKKLEDCDRKAVHQIDQLQREQRHLKRQLEKLGIER
 IRMDSIGSTVSSERSDSDREEIDVDVESTDYLTDGLDWSSSSVSDSDERGSMSQLGSDEGYSSTSIKRIK
 LQDSHKACLGL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6004_g11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002357

ORF Size: 663 bp

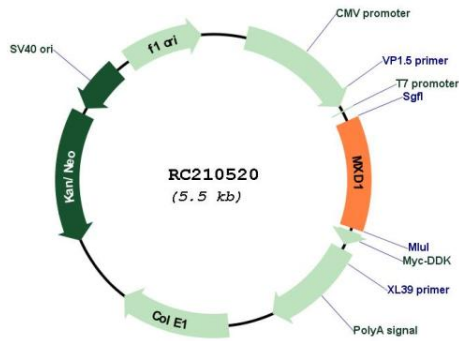
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

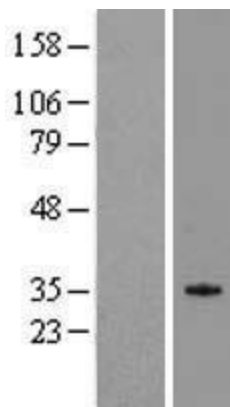
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">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_002357.4
RefSeq Size:	5630 bp
RefSeq ORF:	666 bp
Locus ID:	4084
UniProt ID:	Q05195
Cytogenetics:	2p13.3
Domains:	HLH
Protein Families:	Druggable Genome, Transcription Factors
MW:	25.3 kDa
Gene Summary:	<p>This gene encodes a member of the MYC/MAX/MAD network of basic helix-loop-helix leucine zipper transcription factors. The MYC/MAX/MAD transcription factors mediate cellular proliferation, differentiation and apoptosis. The encoded protein antagonizes MYC-mediated transcriptional activation of target genes by competing for the binding partner MAX and recruiting repressor complexes containing histone deacetylases. Mutations in this gene may play a role in acute leukemia, and the encoded protein is a potential tumor suppressor. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Feb 2011]</p>

Product images:



Circular map for RC210520



Western blot validation of overexpression lysate (Cat# [LY400848]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210520 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).