

Product datasheet for RC206294

MAX (NM_145116) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MAX (NM_145116) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MAX
Synonyms:	bHLHd4; bHLHd5; bHLHd6; bHLHd7; bHLHd8; orf1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC206294 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAGCGATAACGATGACATCGAGGTGGAGAGCGACGAAGAGCAACAGAGGTTTCAATCTGCGGCTGACA
 AACGGGCTCATCATAATGCACTGGAACGAAAACGTAGGGACCACATCAAAGACAGCTTTCACAGTTTGCG
 GGACTCAGTCCCATCACTCCAAGGAGAGAAGGCATCCCGGGCCAAATCCTAGACAAAGCCACAGAATAT
 ATCCAGTATATGCGAAGGAAAAACACACACCAGCAAGATATTGACGACCTCAAGCGGCAGAATGCTC
 TTCTGGAGCAGCAAGGTGAGCACCCGAGCTCGTGGGGCAGCTGGCCCTGCTGTGCTCCAGCCAGGTCAGG
 CTTTGGCACCTGGGCCTGCAGAGTCAGAGCCAGTCATGGAGTATGTGCTCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC206294 protein sequence Red=Cloning site Green=Tags(s)
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MSDNDDIEVESDEEQRFQSAADKRAHHNALERKRRDHKDSFHSLRDSVPSLQGEKASRAQILDKATEY
 IQYMRRKNHHTQQDIDDLKRQNALLEQQGEHPSSWGSWPCAPARSGFTWACRVRAHGVCAQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:	https://cdn.origene.com/chromatograms/mk6322_g08.zip
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Restriction Sites:	SgfI-MluI
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[View online »](#)

Cloning Scheme:



ACCN: NM 145116

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_145116.1](#), [NP_660092.1](#)

RefSeq Size: 575 bp

RefSeq ORF: 404 bp

Locus ID: 4149

Cytogenetics: 14q23.3

Domains: HLH

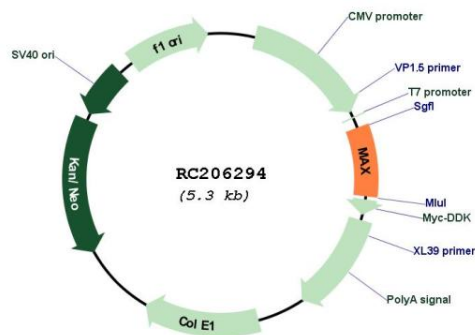
Protein Families: Druggable Genome, Transcription Factors

Protein Pathways: MAPK signaling pathway, Pathways in cancer, Small cell lung cancer

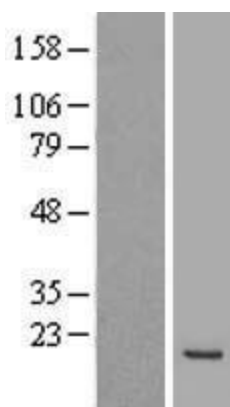
MW: 15.4 kDa

Gene Summary: The protein encoded by this gene is a member of the basic helix-loop-helix leucine zipper (bHLHZ) family of transcription factors. It is able to form homodimers and heterodimers with other family members, which include Mad, Mxi1 and Myc. Myc is an oncoprotein implicated in cell proliferation, differentiation and apoptosis. The homodimers and heterodimers compete for a common DNA target site (the E box) and rearrangement among these dimer forms provides a complex system of transcriptional regulation. Mutations of this gene have been reported to be associated with hereditary pheochromocytoma. A pseudogene of this gene is located on the long arm of chromosome 7. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2012]

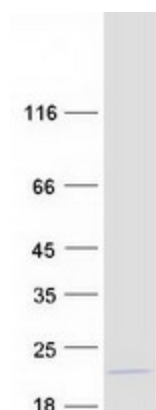
Product images:



Circular map for RC206294



Western blot validation of overexpression lysate (Cat# [LY408022]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206294 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MAX protein (Cat# [TP306294]). The protein was produced from HEK293T cells transfected with MAX cDNA clone (Cat# RC206294) using MegaTran 2.0 (Cat# [TT210002]).