

## Product datasheet for **RC206812**

### MAX (NM\_145112) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** MAX (NM\_145112) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** MAX  
**Synonyms:** bHLHd4  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC206812 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGCGATAACGATGACATCGAGGTGGAGAGCGACGCTGACAAACGGGCTCATCATAATGCACTGGAAC  
GAAAACGTAGGGACCACATCAAAGACAGCTTTCACAGTTTGC GGACTCAGTCCCATCACTCCAAGGAGA  
GAAGGCATCCCGGCCCAAATCCTAGACAAAGCCACAGAATATATCCAGTATATGCGAAGGAAAAACCAC  
ACACACCAGCAAGATATTGACGACCTCAAGCGGCAGAATGCTCTTCTGGAGCAGCAAGTCCGTGCACTGG  
AGAAGGCGAGGTCAAGTGCCCACTGCAGACCACTACCCTCCTCAGACAACAGCCTCTACACCAACGC  
CAAGGGCAGCACCATCTCTGCCTTCGATGGGTGCTCGGACTCCAGCTCGGAGTCTGAGCCTGAAGAGCCC  
CAAAGCAGGAAGAAGCTCCGGATGGAGGCCAGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC206812 protein sequence  
Red=Cloning site Green=Tags(s)

MSDNDIEVESDADKRAHHNALERKRRDHKDSFHSRLRDSVPSLQGEKASRAQILDKATEYIQYMRRKNH  
THQQDIDDLKRQNALLEQQVRALEKARSSAQLQTNYPSSDNSLYTNAKGSTISAFDGCSDSSSESEPEEP  
QSRKKLRMEAS

**TR**TRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6328\\_d02.zip](https://cdn.origene.com/chromatograms/mk6328_d02.zip)



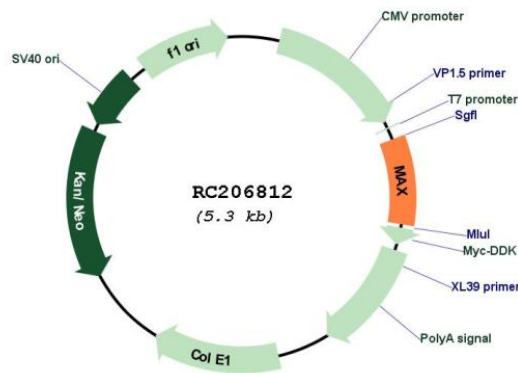
[View online »](#)

Restriction Sites: Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_145112

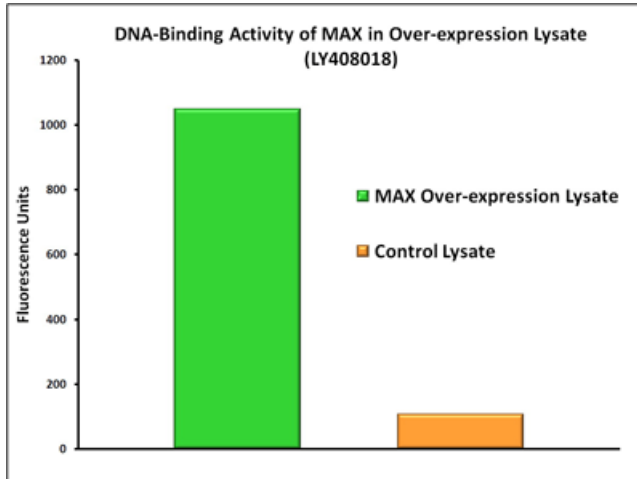
ORF Size: 453 bp

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](#)

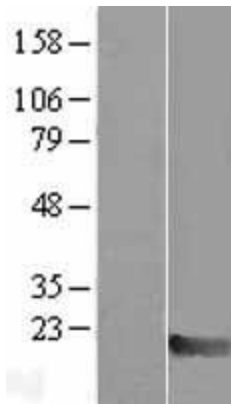
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_145112.3</a>
<b>RefSeq Size:</b>	2018 bp
<b>RefSeq ORF:</b>	456 bp
<b>Locus ID:</b>	4149
<b>UniProt ID:</b>	<a href="#">P61244</a>
<b>Cytogenetics:</b>	14q23.3
<b>Domains:</b>	HLH
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>Protein Pathways:</b>	MAPK signaling pathway, Pathways in cancer, Small cell lung cancer
<b>MW:</b>	17.2 kDa
<b>Gene Summary:</b>	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]

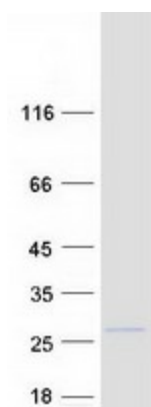
**Product images:**



DNA-binding activity of MAX was measured in OriGene over-expression lysate [LY408018] and a control lysate. Three microliters of each lysate was tested with a transcription factor binding assay utilizing MAX-specific DNA sequences. The high level of activity observed in the over-expression lysate compared to the control lysate demonstrates that the expressed MAX is biologically active in the lysate. Overexpression cell lysates are prepared from HEK293T cells transfected with RC206812 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Western blot validation of overexpression lysate (Cat# [LY408018]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206812 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MAX protein (Cat# [TP306812]). The protein was produced from HEK293T cells transfected with MAX cDNA clone (Cat# RC206812) using MegaTran 2.0 (Cat# [TT210002]).