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Product datasheet for MG224006

Usf1 (NM_009480) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Usf1 (NM_009480) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Usf1
Synonyms:	bHLHb1; bHLHb11
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG224006 representing NM_009480
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGGGGCAGCAGAAAACAGCTGAAACCGAAGAGGGAACAGTGCAGATTCAGGAAGGCGCAGTGGCTA
CTGGAGAGGACCCAACTAGTGTAGCTATCGCCAGCATCCAGTCAGCTGCCACTTTTCCTGACCCCAACGT
CAAGTACGTCTTCCGAACTGAGAATGGGGGCCAGGTGATGTACAGGGTGATCCAGGTGTCAGAGGGGCAG
CTGGATGGCCAGACAGAGGGCTCTGGCGCCATCAGTGGTTACCCTGCCACTCAGTCTATGACCCAGGCAG
TGATCCAGGGAGCTTTCACCAGTGACGATGCCGTTGACACGGAGGGAGCAGCTGCTGAGACACATTATAC
ATATTTCCCCAGCACCGCAGTGGGAGATGGGTCAGGGGGTACCACATCTGGGAGTACTACAGCTGTTGTT
ACCACCCAGGGCTCAGAGGCACTACTGGGGCAGGCAACCCCGCCCAGCACAGGTCAATTCTTTGTGATGA
TGTCACCACAAGAAGTATTGCAGGGAGGGAGCCAGCGATCGATTGCCCCCAGGACCCACCCTTATTCCCC
GAAGTCAGAGGCTCCCAGGACAACTCGAGATGAGAAACGGAGGGCTCAACATAACGAAGTGGAGCGCCGC
CGCCGGGACAAGATCAACAACTGGATTGTACAGCTGTCCAAAATCATCCCAGACTGCTCTATGGAGAGCA
CCAAGTCTGGCCAGAGTAAAGGTGGAATCCTGTCCAAAGCCTGTGATTATATCCAGGAGCTGCGGCAGAG
CAACCACCGGCTGTCTGAAGAGCTGCAGGGGTTAGATCAGTTGCAGCTGGACAACGATGTGCTCCGGCAA
CAGGTGGAAGATCTCAAGAACAAGAACCTGCTCCTGCGAGCTCAGCTTCGGCACCACGGACTCGAGGTCG
TCATCAAGAATGACAGCAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

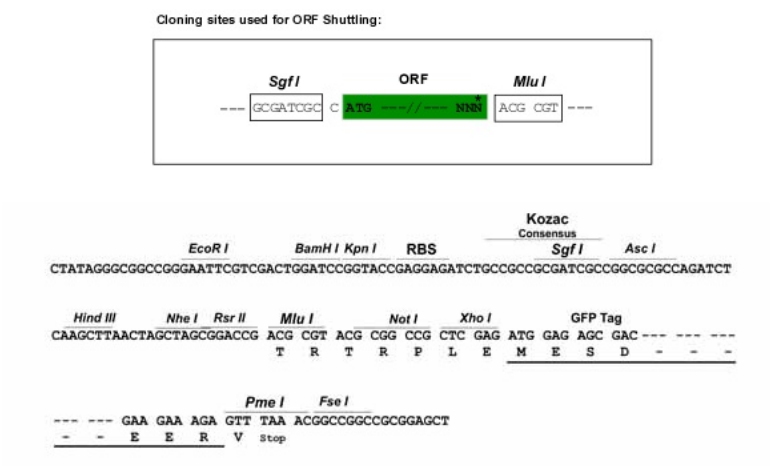
>MG224006 representing NM_009480
Red=Cloning site Green=Tags(s)

MKGQQKTAETEEGTVQIQEGAVATGEDPTSVAIASIQSAATFPDPNVKYVFRTENGGQVMYRVIQVSEGQ
LDGQTEGSGAISGYPATQSMTQAVIQGAFTSDDAVDTEGAAAETHYTYFPSTAVGDGSGGTTSGSTTAVV
TTQGSEALLGQATPPSTGQFFVMMSPQEVLQGGSQRSIAPRTHPYSPKSEAPRTTRDEKRRAQHNEVERR
RRDKINNWIVQLSKIIPDCSMESTKSGQSKGGILSKACDYIQELRQSNHRLSEELQGLDQLQLDNDVLRQ
QVEDLKNKNLLLRAQLRHHGLEVVIKNDSN

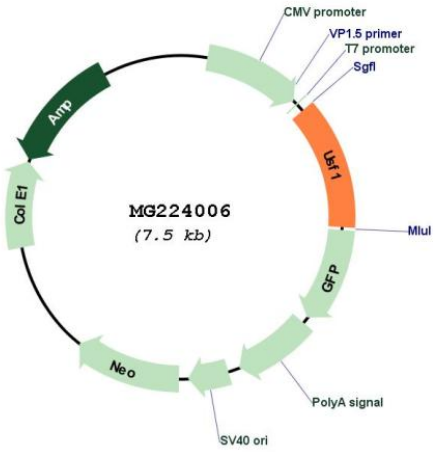
TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_009480

ORF Size: 930 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_009480.3, NP_033506.1
RefSeq Size:	1822 bp
RefSeq ORF:	933 bp
Locus ID:	22278
UniProt ID:	Q61069
Cytogenetics:	1 79.4 cM
Gene Summary:	This protein encoded by this gene is a member of the basic-Helix-Hoop-Helix-Leucine zipper (bHLH-LZ) family and encodes a protein that can act as a transcription factor. Studies indicate that the basic region interacts with DNA at E-Box motifs, while the helix-loop-helix and leucine zipper domains are involved in dimerization with different partners. This protein is involved in a wide array of biological pathways, including cell cycle regulation, immune response, and responses to ultraviolet radiation. Mice lacking most of the coding exons of this gene often lacked both whiskers and nasal fur, and were prone to epileptic seizures, while mice lacking both this gene and another family member, Usf2, displayed embryonic lethality (PMID:9520440). Mutations in the human ortholog of this gene have been associated with Familial Combined Hyperlipidemia (FCHL) in humans. Pseudogenes of this gene are found on chromosome 11 and the X chromosome. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Mar 2015]