

## Product datasheet for **MG222331**

### Mlx (NM\_001159385) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Mlx (NM_001159385) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Mlx
Synonyms:	bHLHd13; Tcf14; Tf4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG222331 representing NM_001159385 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGACGGAGCCGGGCGCCTCTCCGGAGGACCCTTGGGTCAAGGTCGAGTATGCCTACAGTGACAACAGCC  
TGGATCCTGGGCTTTTTGTAGAAAGCACCCACAAGGGGAGTGTAGTGTCCAGAGCTAATAGCATCGGCTC  
CACCAGTGCTCTTCTGTCCCAACACAGATGATGAGGACAGTGATTATCAGCAGGAGTCTACAAGGAG  
TCCTACAAAGACCGGAGGCGCGTGCACACTCAGGCTGAACAGAAGAGAAGGGATGCTATTAAGAGAG  
GCTATGATGACCTTCAGACCATTGTCCCTACCTGCCAGCAGCAGGATTTCTCCATTGGCTCCAAAAACT  
CAGCAAAGCCATCGTTCTACAGAAGACCATTGACTACATCCAGTTTTTACACAAGGAGAAGAAAAAGCAG  
GAGGAAGAAGTATCCCACTGCGCAAGGACGTCACAGCCTTGAAGATAATGAAAGTGAAGTATGAGCAAA  
TCGTGAAGGCACATCAGGACAACCCTCATGAGGGAGAGGACCAGGTCTCTGACCAGGTCAAGTTCAACGT  
CTTTCAAGGCATCATGGACTCCCTCTTCCAGTCTTTCAACGCCTCTATCTCTGTGGCCAGCTTCCAGGAG  
CTCTCAGTTGTGTCTTTCAGCTGGATTGAGGAACACTGTGAGCCACAGACTCTACGAGAGATTGTGATCG  
GTGTCCTTCATCAGTTGAAAAACCAACTCTAC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >MG222331 representing NM\_001159385  
Red=Cloning site Green=Tags(s)

MTEPGASPEDPWVKVEYAYSNSLDPGLFVESTHKGSVSRANSIGSTSASSVPNTDDESDYQQESYKE  
 SYKDRRRRAHTQAEQKRRDAIKRGYDDLQTIPTCQQQDFSIGSQKLSKAIVLQKTIQFLHKEKKKQ  
 EEEVSTLRKDV TALKIMKVNYEQIVKAHQDNPHGEDQVSDQVKFNVFQGIMDSLQSFNASISVASFQE  
 LSACVFSWIEEHCEPQTLREIVIGVLHQLKNQLY

TRTRPLE – GFP Tag – V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



**ACCN:** NM\_001159385

**ORF Size:** 732 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\\_001159385.1](#), [NP\\_001152857.1](#)

**RefSeq Size:** 1830 bp

**RefSeq ORF:** 735 bp

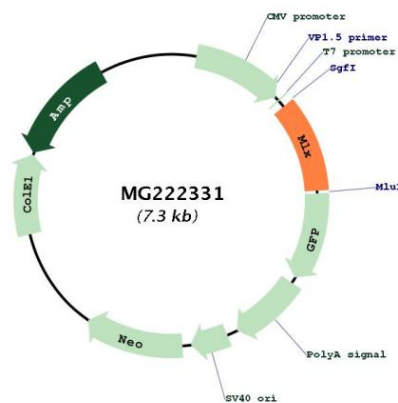
**Locus ID:** 21428

**UniProt ID:** [O08609](#)

**Cytogenetics:** 11 D

**Gene Summary:** Transcription regulator. Forms a sequence-specific DNA-binding protein complex with MAD1, MAD4, MNT, WBSCR14 and MLXIP which recognizes the core sequence 5'-CACGTG-3'. The TCFL4-MAD1, TCFL4-MAD4, TCFL4-WBSCR14 complexes are transcriptional repressors. Plays a role in transcriptional activation of glycolytic target genes. Involved in glucose-responsive gene regulation.[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MG222331