

## Product datasheet for **RG222157**

### MLX interacting protein (MLXIP) (NM\_014938) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MLX interacting protein (MLXIP) (NM_014938) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MLXIP
Synonyms:	bHLHe36; MIR; MONDOA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG222157 representing NM\_014938  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCCGCCGACGTCTTCATGTGCTCCCGCGCCGGCCTCGCAGCCGGGGCCAGGTGCTGCTCAAGC  
 CCCAGGTGTCGAGGACGACGACGACTCGGACACGGATGAGCCGTCCCGCCGCCCGCTCCGGCGCGGC  
 CACCCCGGCCCGGCCACGCGAGCGCCGCCACCGCCGCTCGGGCCGGGCGGGCCGAGGAACCT  
 CCGCGCCGCCAGCAGATCATCCACAGCGCCACTTCATGGTGTGCTCGCCGACCGAGAGACCCGCCCA  
 AGAAGGGCTACGATTTGACACGGTCAACAAACAGACGTGCCAGACCTACAGTTCCGCAAGACTAGCTC  
 CTGCCACCTGTCCATCGACGCTCGCTACCAAGCTCTTCGAGTGCATGACTTTGGCCTACAGTGGGAAG  
 TTGGTGTCTCAAAGTGAAGAATTTCAAGGGCTGAAGCTACAGTGGAGAGACAAGATCCGGCTCAATA  
 ATGCCATCTGGCGGCCCTGGTACATGCAGTATCTGGAGAAGCGCAAGAATCCTGTGTCCACTTTGTGAC  
 ACCCTTGACGGCTCTGTGGACGTAGACGAGCACCGCCGGCCGGAGGCCATCACCGGAAGGGAAGTAC  
 TGAAGAGCCGCATCGAGATTGTGATCCGGGAGTATCACAAAGTGGAGAACCTACTTCAAGAAAAGGCTAC  
 AGCAGCACAAAGGATGAGGACCTCTCCAGCTGGTCCAGGACGATGACATGCTGTATTGGCACAAAGCACGG  
 GGATGGATGGAAGACCCCGTCCCATGGAGGAGGATCCCTGTGGACACAGACATGCTCATGTGCGAA  
 TTCAGCGACACCCCTTTCTCCACACTTTCTCACACCAGCCGGTGGCCTGGCCCAATCCCGGGAATAG  
 CACATCTGGGAAATGCAGACATGATCCAGCCGGGACTGATTCCTTTGCAGCCTAACCTGGACTTCATGGA  
 CACCTTTGAGCCTTTCCAGGACCTTCTCTTCTAGCCGCTCCATTTTGGCTCCATGCTACCTGCATCT  
 GCCTCAGCACCTGTACCAGATCCCAACAACCCACCTGCACAGGAGAGCATCCTGCCGACCACAGCCCTCC  
 CCACTGTGAGCCTTCTGACAGCCTCATCGCCCCCTACCGCCCATCCCTGGTCCATCAGATGGGCA  
 GGGCTGTGAACACACCTCCCGGACTGAGGACCCGTTTATCCAGCCACGGAATTCGGTCCCTCAGAGCCG  
 CCACTGAGTGTCCCGCAGCCCTTCTCCCTGTCTTACCATGCCCTGTGTCTCCAGCCCGCCCCAC  
 CGCCATCTCCCGTGTACCATTAGTTCCTCCTCCTGCCACTGCCCTGAACCCCGGCTCCACCCAC  
 CTTCCATCAGCCACAGAAGTTTGTGGAGTCAACAAAGCGCCGTCTGTATCACCCACACGGCCTCTGCC  
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 CTGCCCGTCCAGCGCCCTTGTGGCTGGCACTGTCTCCTGTACCCGGCTCCCGAGCCAGGTTAAC  
 TTTTGTGACCCCAACCTGTATCCTTGACTGGGGCAGGCCTAAGCAGCCCAAAAATAGTGCCTGCT  
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 CACAAGCGGTGATCATGACGTACAGGACCTGAAGAGAGAAGGGATGTTGGCCTCCACCGTGTCCAGTC  
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 GTGACAGATCTCGGCATGGCAGCAGCAGCCCGCTGCCCGCTCTCCCGCTCTTCCAAAGCACAGCGC  
 AAGACCCCTGGGGAAGGGCGAGCAGGTCCCGTGCATGGGGCAGCCCCAGGTCACTGTACAGGGCC  
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 ATCAAGCCGCTGTTTGTGCTTCAAGGCATGGTGTCCACCAGCAGCCTGGAGGAGCTGCACCGGACGG  
 CGCTCTCTGGCTGGACCAGCACTGCTCCTGCCATCCTCAGGCCGATGGTATTGAGCAGCTGCGGCA  
 GCTGAGCACCTCCACCTCATCTCACAGACCCGGCACAGCTGCCAGAGCAGGCGTCCAAGGCTGTACCC  
 AGGATTGGCAAGAGATTGGGAGAGTCC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG222157 representing NM\_014938  
 Red=Cloning site Green=Tags(s)

MAADVFMCSPPRRPRSRGRQVLLKPQVSEDDDDSDTDEPSPPPASGAATPARAHASAAAPPPRAGPGREEP  
 PRRQQIIHSGHFMVSSPHREHPPKKGYDFDTVNKQTCQTYSFGKTSSCHLSIDASLTKLFECMTLAYS GK  
 LVSPKWNFKGLKLQWRDKIRLNNAIWRAYMQYLEKRKNPVCHFVTPLDGSVDVDEHRRPEAITTEGKY  
 WKSRIEIVIREYHKWRTYFKKRLQQHKDEDLSSLVQDDMLYWHKHGDKWKTVPVMEEDPLLDTDMLMSE  
 FSDTLFSTLSSHQPVAWPNPREIAHLGNADMIQPLIPLQPNLDFMDTFEPFQDLFSSSRISFGSMLPAS  
 ASAPVPDPNPPAQESILPTTALPTVSLPDSL IAPPTAPSLAHMDGQGCEHTSRTEDPFIQPTDFGPSEP  
 PLSVPQPFLPVFTMPLLSPSPAPPPISVPLPLVPPATALNPPAPPTFHQPQKFAGVKNKAPSVITHTASA  
 TLTHDAPATTFSSQSQLVITTHHPAPSAAPCGLALSPVTRPPQPRLTFVHPKPVSLTGGRPKQPHKIVPA  
 PKPEPVSLLVKNARIAPAAFSGQPQAVIMTSGPLKREGMLASTVSQSNVVIAPAAIARAPGVPEFHSSIL  
 VTDLGHGTSSPPAPVSRLFPSTAQDPLGKGEQVPLHGGSPQVTVTGPSRDCPNSGQASPCASEQSPSPQS  
 PQNNCSGKSDPKNVAALKNRQMKHISAEQKRRFNKMCDFMLNSLISNNSKLTSHAITLQKTVEYITKLQ  
 QERGMQEEARRLREEIEELNATIIISCCQLLPATGVPVTRRQFDHMKDMFDEYVKTRTLQNWKFWIFSI  
 IKPLFESFKGMVSTSSLEELHRTALSWLDQHCSLPILRPMVLSLTLRQLSTSTSTILTDPALPEQASKAVT  
 RIGKRLGES

TRTRPLE - GFP Tag - V

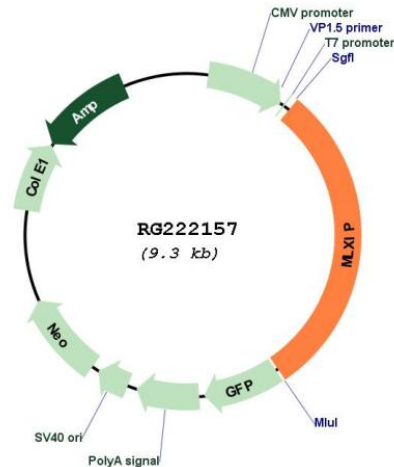
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**Plasmid Map:**


**ACCN:** NM\_014938

**ORF Size:** 2757 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in *E. coli* are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_014938.2](#), [NP\\_055753.2](#)

RefSeq Size: 2760 bp

RefSeq ORF: 2760 bp

Locus ID: 22877

UniProt ID: [Q9HAP2](#)

Cytogenetics: 12q24.31

Domains: HLH

Protein Families: Transcription Factors

**Gene Summary:** This gene encodes a protein that functions as part of a heterodimer to activate transcription. The encoded protein forms a heterodimer with Max-like protein X (MLX) and is involved in the regulation of genes in response to cellular glucose levels. [provided by RefSeq, Mar 2014]