

Product datasheet for **MG222972**

Lig1 (NM_010715) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Lig1 (NM_010715) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Lig1
Synonyms:	AL033288; LigI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG222972 representing NM_010715
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCAGAGAAGTATTATGTCATTTTTTCAACCCACAAAAGAAGGTAAAGCGAAGAAGCCAGAGAAGGAGA
 CACCCAGCAGCATCAGAGAGAAGGAACCCCTCCAAGGTGGCGCTGAAGGAGAGGAATCAAGTGGTGCC
 CGAGAGTGATTCTCCAGTGAAGAGGACAGGAAGGAAGGTAGCCAGGTTCTGAGCTGTGAAGGGGAGGAC
 GAAGATGAAGCCCTGGCACCCCAAGTCCAGAAGCCTGTGTCAGACTCTGAACAGAGCTCTCCTCCCA
 GCCCTGACACATGTCCTGAGAACAGTCTGTCTTCAACTGCAGCTCCCCATGGACATCTCCCCATCAGG
 ATTCACAAAGCGTCGAACTGCGCGGAAGCAGCTCCCCAACGGACAATCAAGACTCTTGAGGAGCAG
 AATGAGGACAAAACAAAACAGTAAGAAAAGGAAGAAAGAAGAGACCCAAAAGAAAGCCTCGCAG
 AGGCTGAAGACGTAAAACAGAAGGAAGAAAAGGAGGGGACCAGCTCATAGTCCCCTCTGAGCCCAAAA
 GTCCTGAGTCAGTAACCCTGACAAAGACAGAGAACATTCCAGTGTGTAAAGCAGGAGTAAACTGAAG
 CCTCAGGAAGAGGAACAGAGCAAACCTCCTGCTAGAGGTGCCAAGACTGAGCAGTTCCTTACACCCC
 GAAAACAGCAGTGAAGTGAAGTCAAACAAGAAGAGTCAGGCACTCTAAGGAAGGAAGAGACCAAGGG
 AACCTGGATCCAGCAAATTATAATCCTTCCAAGAATAACTATCATCCCATTGAAGATGCCTGCTGGAAA
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 AAGGGATCTCTTCTGTTTTCTCGTTTATTCTGTCCGTAAAGACAAGCAGCCAGAGCAGGCCACTAC
 CAGTAACAGGTTGCCTCTTGTACCGGAAGCAGAGTCAGATTGAGAACCAACAAAGCTCAGACTTGGAC
 TCCGACGTTGAAGACTAT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG222972 representing NM_010715
 Red=Cloning site Green=Tags(s)

MQRSIMSFQPTKEGKAKPEKETPSSIREKEPPPVALKERNQVVPESDPSVKRTGRKVAQVLSCEGED
 EDEAPGTPKVQKPVSDSEQSSPPSPDTCPENSPVFNCSPPMDISPSGFPKRRTARKQLPKRTIQDTLEEQ
 NEDKTKTAKKRKKEEETPKESLAEADVQKKEEKGDLIVPSEPTKSPESVTLTKTENIPVCKAGVKLK
 PQEEEEQSKPPARGAKTLSSFFTPRKPAVKTEVKQEEESGTLRKEETKGTLDPANYNPSKNNYHPIEDACWK
 HGQKVPFLAVARTFEKIEEVSARLKMVETLSNLLRSVVALSPPDLLPVLVLSLNRLGPPQQGLELGVGDG
 VLLKAVAQATGRQLESIRAEVAEKGDVGLVAENSRSTQRLMLPPPPLTISGVFTKFCDIARLTGSASMAK
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 KMWLEEQGMILKQTFCEVPDLDRIPVLLHGLERLPEHCKLSPGVLPKPLAHPTRGVSEVLKRFEEVD
 FTCEYKYGQRAQIHVLEGGVIFSRNQEDNTGKYPDIISRIPKIKHPSVTSFILDTEAVAWDREKKQI
 QPFQVLTTRKRKEVDASEIQVQVCLYAFDLIYLNESLVRQPLSRRRQLLRENFVETEGEFVFTTSLDTK
 DTEQIAEFLEQSVKDSCEGLMVKTLDVDATYEAKRSHNWLKLLKDYLDGVGDTLDLVVIGAYLGRGKRA
 GRYGGFLLAAYDEESEELQAICKLGTGFSDLEEHHQSLQALVLPTRPVYRIDGAVAPDHWLDPISIVW
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 SDVEDY

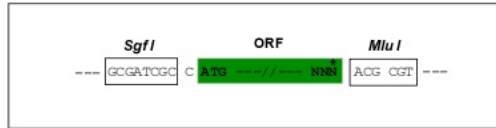
TRTRPLE – GFP Tag – V

Restriction Sites:

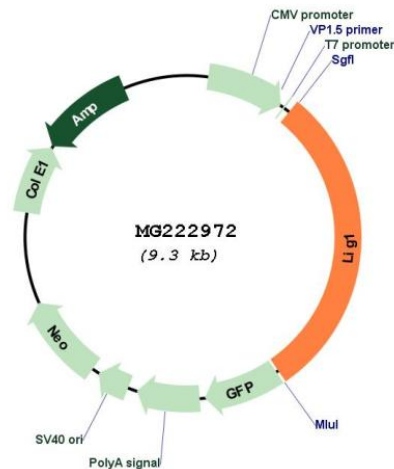
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_010715

ORF Size: 2751 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_010715.3](#)

RefSeq Size: 3111 bp

RefSeq ORF: 2799 bp

Locus ID: 16881

UniProt ID: [P37913](#)

Cytogenetics: 7 7.82 cM

Gene Summary: DNA ligase that seals nicks in double-stranded DNA during DNA replication, DNA recombination and DNA repair.[UniProtKB/Swiss-Prot Function]