

Product datasheet for **MG216295**

lws1 (NM_173441) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	lws1 (NM_173441) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	lws1
Synonyms:	1700069O15Rik; 3000008H23; AL117927; AW214353
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG216295 representing NM_173441
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGACTCGGAGTACTACAGCGGGGACCAGTCAGATGATGGTGGTGAACCCAGTACAGGACGAGCGGG
 ATTCAGGGTCAGATGGTGAAGGATGGTGTAAACCGAGCAGCACTCCGGATCCGACACTGGAAGGTAGACCA
 CCACTCAGAGAATGAAACTAGTGATAGAGAAGATGGCTTGGCCAAGATACATAATGGAACAGACTCTGAG
 AATGATGAACCTTCCAATGCTAATGCCAGTGACTCTGAAAGTGAGGAGCTTACAGGCCAAAGGACAGTG
 ACTCTGACTCTGAGGAGCATGCAGAGTCTCCTGCTAGTGATTCTGAAAATGAACCTGTCAACCAACATGG
 GAGCGACTCTGAAAATGAAGAGCTGCTTAAATGGGCATGCCAGTGACTCTGAAAAGGAAGAGGTTAGCAAG
 CATGCCGCCAGTGACTCTGAAGCTGAGGACACTCTGCAGCCTCAGGTGAGCGAGTCTGACAGTGAAGATC
 CCCCAAGGCCCCAGGCCAGTGACTCAGAAAATGAGGAGCCTCCCAAACCTCGGATAAGTGACTCGGAGAG
 TGAGGAGTCCCAAACCCGAGTCAGTGACTCAGAAAAGTGAGGACCCTCCAAGGCCCCAGGCCAGTGAC
 TCAGAAAAGCGAGGAGCTCCCAAACCCGAGTCAGCGACTCTGAAAGTGAGGACCCTCCAAGGCCCCAGG
 CCAAGTGACTCAGAAAAGCGAGGAGCTCCCAAACCCGAGTCAGCGACTCTGAAAAGTGAGGACCCTCAGAA
 AGGACCTGCTAGTGATTCTGAAGCTGAGGATGCCTCCAGACACAAAGAGAAGCCAGACTCAGATGACAGT
 GATGGGGAGAATAAGAGGGAAGATTCTGAAGTGCAGAATGAGTCAGATGGCCATACAGACAGAAAAGGAC
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 GGAGGGGGATGAGGAGAAAGTAGCAAAGCGGAAGGCTGCTGTGCTTTCTGATAGTGAGGATGACGCGGC
 AACGCATCAGCAAAGAAGAGTCGAGTTGTCTGTGATGCTGATGACTCTGATAGTGATGTTGTATCGGACA
 AGTCAGGCAAACGAGAGACAACAGTAGCATCTGACAGTGAAGAAGAAGCCGGGAAAGAAGTCTTCTGT
 GAAGAAGAAGGAAGACAAGGACCTGTTTGGGAGTGACAGTGAGTCCGGCAATGAAGAAGAAAATCTTATT
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 CAAGCATATGGACTTTCTGTCAGATTTTGGATGATGTTACAACGAAAAAAGCATGTGTGGCAAACGC
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 TGAATGAAGCTGCTGAGGAAGACAGACAATTGAATAATCAAAAAAGCCAGCTCTGAAAAAATTAACCTT
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 GAGTGGTCTCGGCCCATATTTGGTCTTACCTCAAATAAAGGAATGACAAGAGAAGAAAGGGAACAGA
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 GTCCCAATGCCATCAACAAGGACTATGTTGTGAGGCCAAGTGAAGTGTAGAAATGGAGTCATCCAGGT
 TTCAGGCATCCTCAAGAAGGATATCAGTCGACTGGATAAACAGATGAGAAAGTTCACAGATATCAGGAA
 AAAAGCAGATCTGCACATGCAGTAAAAATCAGCATCGAGGGCAATAAAATGCCATTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG216295 representing NM_173441
 Red=Cloning site Green=Tags(s)

MDSEYYSGDQSDDGATPVQDERDSGSDGEDGVTEQHSGSDTGSVDHSENETSDREDGLAKIHNGTDSE
 NDEPSNANASDSESEELHRPKDSDSDSEEHAESPASDSENEPVNQHGSDSENEELLNGHASDSEKKEEVSK
 HAASDSEAEDTLQPQVSESDSEDPQASDSENEEPPKPRI SDSESEELPKPRVSDSESDPPRPQASD
 SESEELPKPRVSDSESDPPRPQASDSESEELPKPRVSDSESDPQKGPASDSEAEASRHKEKPDSDSDS
 DGENKREDSVQNESDGHTDRKGLHSSDSEEEEPKRQKIDSDDDEEKEGDEEKVAKRKAAVLSDSEDDAG
 NASAKKSRVVCADDSDSDVSDKSGKRETTVASDSEEEAGKEESSVKKKEDKDLFGSDSESNGEEENLI
 ADIFGESGDEEEEF TGFNQEDLEEEKNETQLKEAEDSDSDDNIRGKHMDFL SDFEMMLQRKSMCGKR
 RRNRDGGTFISDADDVVSAMIVKMNEAAEEDRQLNNQKKPALKKLTLLPTVVMHLKKQDLKETFIDSGVM
 SAIKEWLSPLPDRSLPALKIREELLKILQELPSVSQETLKHSGIGRAVMYLKHPKESRSNKDMAGKLIN
 EWSRPIFGLTSNYKGMTREEREQRDLEQMPQRRRLSSTGGQTPRRDLEKVL TGEKALRPDGPFGCARAR
 VPMPNSKDYVVRPKWNVEMESSRFQASSKKGISRLDKQMRKFTDIRKKSRSAAHAVKISIEGNKMPL

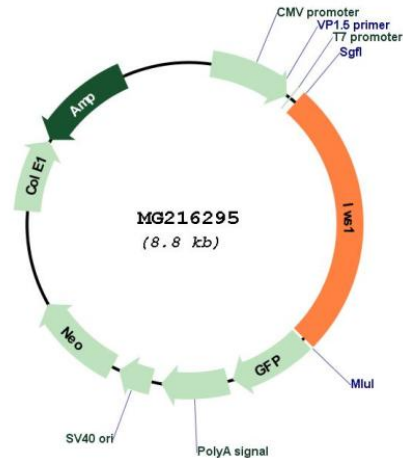
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: NM_173441

ORF Size: 2298 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_173441.3](#), [NP_775617.1](#)

RefSeq Size: 9623 bp

RefSeq ORF: 2301 bp

Locus ID: 73473

UniProt ID: [Q8C1D8](#)

Cytogenetics: 18 B1

Gene Summary: Transcription factor which plays a key role in defining the composition of the RNA polymerase II (RNAPII) elongation complex and in modulating the production of mature mRNA transcripts. Acts as an assembly factor to recruit various factors to the RNAPII elongation complex and is recruited to the complex via binding to the transcription elongation factor SUPT6H bound to the C-terminal domain (CTD) of the RNAPII subunit RPB1 (POLR2A). The SUPT6H:IWS1:CTD complex recruits mRNA export factors (ALYREF/THOC4, EXOSC10) as well as histone modifying enzymes (such as SETD2) to ensure proper mRNA splicing, efficient mRNA export and elongation-coupled H3K36 methylation, a signature chromatin mark of active transcription (By similarity).[UniProtKB/Swiss-Prot Function]