

Product datasheet for **RR209659**

lws1 (NM_001034918) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	lws1 (NM_001034918) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	lws1
Synonyms:	RGD1304762
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RR209659 representing NM_001034918
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGACTCGGAGTACTACAGCGGTGACCAGTCAGATGATGGTGGTGAACCCAGTACAGGACGAGCGGG
 ATTCAGGGTCAGATGGTGAAGGATGATGTAACGAGCAGCACTCCGGATCCGACACTGGAAGGTAGACCG
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Protein Sequence: >RR209659 representing NM_001034918
 Red=Cloning site Green=Tags(s)

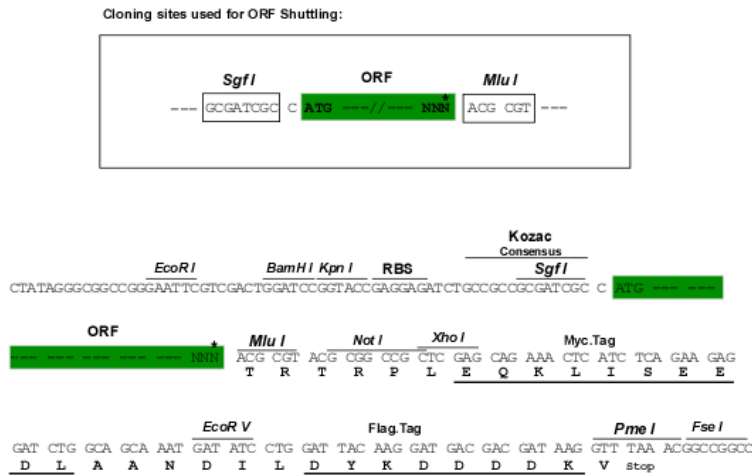
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 HAASDSE TEDTLQPQGSSESDPPRPQASDSESEPPKPRI SDSESEELPKPRI SDSESDPPRPQVSD
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 DIFGESGDEEEEF TGFNQEDLEEEKNETQLKEAEDSDSDDNIKRGKHMDFL SDFEMMLQRKSMCGKRR
 RNRDGGTFISDADDVVSAMI VKMNEAAEEDRQLNNQKPKALKKLTLLPTVVMHLKKQDLKETFIDSGVMS
 AIKEWLSPLPDRSLPALKIREELLKILQELPSVSQETLKHSGIGRAVMYLYKHPKESRSNKDMAGKLINE
 WSRPIFGLTSNYKGMTREEREQRDLEQMPQRRMSSTGGQTPRRDLEKVL TGE EKALRP GDPGFCARARV
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TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

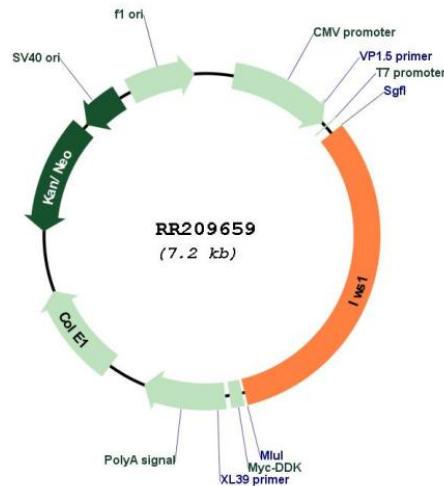
Restriction Sites:

SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001034918

ORF Size: 2292 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_001034918.1](#), [NP_001030090.1](#)

RefSeq Size: 3010 bp

RefSeq ORF: 2295 bp

Locus ID: 291705

UniProt ID: [Q3SWT4](#)

Cytogenetics: 18p12

MW: 85.4 kDa

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]