

## Product datasheet for **SC316507**

### MSL1 (NM\_001012241) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MSL1 (NM_001012241) Human Untagged Clone
Tag:	Tag Free
Symbol:	MSL1
Synonyms:	MSL-1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001012241, the custom clone sequence may differ by one or more nucleotides

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ATGGAAGGCGGATGCAGCTGGTAAAGAAGGATAACGAGAAAGAAAGGCACAAGCTGTTTCAGGGCTATG
AAACTGAAGAGAGAGAGGAAACAGAGCTATCTGAGAAAATTAAGTGGAGTGCCAGCCGGAGCTTCCGA
GACATCCAGACTCTGCCTCCCAAGCCCTTCTCATGTGGCGGAGTGGAAGGGACATAAAGGAAATCC
CCATTTGGAAGTACAGAAAGAAAGACTCCTGTTAAAAAGCTGGCTCCTGAATTTTCAAAGTCAAAACAA
AAACTCCTAAGCACTCTCCTATTAAGAGGAACCTGTGGTTCTTATCTGAAACTGTTTGTAACGTGA
ATTGAGGAGCCAAGAAACCCAGAAAAGCCCGGTCTTCAGTGGACACCCACCAAGACTCTCCACTCCC
CAAAGGGACCCAGCACCCATCCCAAGGAGAAAGCCTTCTCAAGTGAGATAGAAGATTTGCCGTACCTTT
CCACCACAGAAATGTATTTGTGTCGTTGGCACCAGCCTCCCCATCACCGTTACCATTACGGGAATCCTC
TCCAAAGAAGGAGGAGACTGTAGCAAGGTGTCTGATGCCATCAAGTGTTCAGGAGAAATTCAGTCTTG
GCTGTTCTTCTTGGAGGGACCACTCAGTAGAGCCTCTAAGGGACCCAAATCCTTCAGACCTTTTGGAGA
ACCTGGATGACAGTGTGTTTTGAAGCGGCATGCAAACTGGAGCTGGATGAGAAGAGAAGGAAAAGATG
GGATATTCAGAGGATCAGGGAACAAAGAATTTACAGCGACTGCAGCTCAGAATGTATAAAAGAAAGGA
ATTCAGGAATCTGAGCCTGAGGTTACCTCATTTTTCCCTGAGCCAGATGATGTTGAAAGTTTGATGATTA
CCCCCTTCTTGCTGTTGTAGCATTTGGACGACCATTACCAAAATTAAGTCCACAGAATTTGAGCTACC
CTGGTTGGATGAGCGTAGCCGATGCAGATTGGAGATCCAGAAGAAGCAACACCTCACCGGACGTGTAGG
AAATAG
  
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Restriction Sites:	NotI-NotI
ACCN:	NM_001012241
Insert Size:	4300 bp


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<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>OTI Annotation:</b>	The ORF of this clone has been fully sequenced and found to be a perfect match to NM_001012241.1, but the ORF of this cDNA clone is 789bp longer than the reference.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u>NM_001012241.1, NP_001012241.1</u>
<b>RefSeq Size:</b>	3834 bp
<b>RefSeq ORF:</b>	1056 bp
<b>Locus ID:</b>	339287
<b>UniProt ID:</b>	<u>Q68DK7</u>
<b>Cytogenetics:</b>	17q21.1
<b>Gene Summary:</b>	<p>Component of histone acetyltransferase complex responsible for the majority of histone H4 acetylation at 'Lys-16' (H4K16ac) which is implicated in the formation of higher-order chromatin structure (PubMed:16227571). Greatly enhances MSL2 E3 ubiquitin ligase activity, promoting monoubiquitination of histone H2B at 'Lys-34' (H2BK34Ub) (PubMed:21726816). This modification in turn stimulates histone H3 methylation at 'Lys-4' (H3K4me) and 'Lys-79' (H3K79me) and leads to gene activation, including that of HOXA9 and MEIS1 (PubMed:21726816). In the MSL complex, acts as a scaffold to tether MSL3 and KAT8 together for enzymatic activity regulation (PubMed:22547026).[UniProtKB/Swiss-Prot Function]</p>