

## Product datasheet for **SC126369**

### ORC1 (NM\_004153) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ORC1 (NM_004153) Human Untagged Clone
Tag:	Tag Free
Symbol:	ORC1
Synonyms:	HSORC1; ORC1L; PARC1
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_004153 edited  
 CTTTGGTCTGGCTTTCGGCCCGTAGTTGTAGAAGGAGCCCTGCTGGTGCAGGTTAGAGG  
 TGCCGCATCCCCGGAGCTCTCGAAGTGGAGGCGGTAGGAAACGGAGGGCTTGCGGCTAG  
 CCGGAGGAAGCTTTGGAGCCGGCCATGGCACACTACCCACAAGGCTGACTACCAGAAAA  
 ACTTATTCATGGGTTGGCAGGCCCTTGTGGATCGAAAACTGCACTACCAAACCTATAGA  
 GAAATGTGTGTGAAAACAGAAGTTGTTCCACCGAGATTCACATCCAGATTGGACAGTTT  
 GTGTTGATTGAAGGGGATGATGATGAAAACCCGTATGTTGCTAAATTGCTTGAGTTGTTT  
 GAAGATGACTCTGATCCTCCTAAGAAACGTGCTCGAGTACAGTGGTTTGTCCGATTC  
 TGTGAAGTCCCTGCCTGTAACGGCATTGTTGGGCCGGAAGCCTGGTGCACAGGAAATA  
 TTCTGGTATGATTACCCGGCCTGTGACAGCAACATTAATGCGGAGACCATCATTGGCCTT  
 GTTCGGGTGATACCTTTAGCCCCAAAGGATGTGGTACCGACGAATCTGAAAAATGAGAAG  
 AACTCTTTGTGAAACTATCCTGGAATGAGAAGAAATTCAGGCCACTTTCCTCAGAACTA  
 TTTGCGGAGTTGAATAAACCCACAAGAGAGTGCAGCCAAGTGCCAGAAACCCGTGAGAGCC  
 AAGAGTAAGAGTGCAGAGAGCCCTTCTTGGACCCAGCAGAACATGTGGCCAAAAGGATT  
 GAATCAAGGCACTCCGCCTCAAATCTCGCCAACTCCTACCCATCCTTTACCCCAAGA  
 GCCAGAAAAGAGGCTGGAGCTTGGCAACTTAGGTAACCCTCAGATGTCCAGCAGACTTCA  
 TGTGCCTCCTGGATTCTCCAGGAAGAATAAACCGGAAAGTGGCCTTCTCGGAGATCACC  
 TCACCTTCTAAGAGATCTCAGCCTGATAAACTTCAAACCTGTCTCCAGCTCTGAAAGCC  
 CCAGAGAAAACCCAGAGAGACTGGACTCTTTATACTGAGGATGACAAGAAGGCTTCACCT  
 GAACATCGCATAATCCTGAGAACCCTGAATTCAGCTTCGAAAACCATAGACATTAGAGAG  
 GAGAGAACACTTACCCCTATCAGTGGGGACAGAGATCTTCAGTGGTGCATCCGTGATT  
 CTGAAACCAGAAAACATCAAAAAGAGGGATGCAAAAAGCAAAAAGCCAGAAATGAAGCG  
 ACCTCTACTCCCCATCGTATCCGCAGAAAGAGTTCTGTCTTGACTATGAATCGGATTAGG  
 CAGCAGCTTCGGTTTCTAGGTAATAGTAAAAGTGACCAAGAAGAGAAAGAGATTCTGCCA  
 GCAGCAGAGATTCAGACTCTAGCAGTGACGAAGAAGAGGCTTCCACACCCGCCCTTCCA  
 AGGAGAGCACCCAGAAGTGTGTCAGGAACCTGCGATCTTCTTGAAGTCATCCTTACAT  
 ACCCTCACGAAGGTGCCAAAAGAAGAGTCTCAAGCTAGAACGCCACGTTGTGCCGCTCCT



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CAGATCCGTAGTCGAAGCCTGGCTGCCAGGAGCCAGCCAGTGTGCTGGAGGAAGCCCGA  
 CTGAGGCTGCATGTTTCTGCTGTACCTGAGTCTCTCCCTGTCGGGAACAGGAATCCAA  
 GACATCTACAATTTTGTGGAAAGCAAACCTTGACCATACCGGAGGGTGCATGTACATC  
 TCCGGTGTCCCTGGGACAGGGAAGACTGCCACTGTTTATGAAGTGATACGCTGCCTGCAG  
 CAGGCAGCCCAAGCCAATGATGTTCTCCCTTTCAATACATTGAGGTCAATGGCATGAAG  
 CTGACGGAGCCCCACCAAGTCTATGTGCAAACTTGCAGAAGCTAACAGGCCAAAAAGCA  
 ACAGCCAACCATGCGGCAGAAGTCTGCTGGCAAAGCAATTCTGACCCGAGGGTCACTCAG  
 GAAACCACCGTCTGCTTGTGGATGAGCTCGACCTTCTGTGGACTCACAACAAGACATA  
 ATGTACAATCTCTTTGACTGGCCCACTCATAAGGAGGCCCGCTTGTGGTCTGGCAATT  
 GCCAACACAATGGACCTGCCAGAGCGAATCATGATGAACCGGGTGTCCAGCCGACTGGGT  
 CTTACCAGGATGTGCTTCCAGCCCTATACATATAGCCAGCTGCAGCAGATCCTAAGGTCC  
 CGGCTCAAGCATCTAAAGGCCTTTGAAGATGATGCCATCCAGCTGGTAGCCAGGAAGGTA  
 GCAGCACTGTCTGGAGATGCACGACGGTGCCTGGACATCTGCAGGCGTCCACAGAGATC  
 TGTGAGTTCTCCAGCAGAAGCCTGACTCCCCTGGCTGGTACCATAGCCCACTCAATG  
 GAAGCTGTGGATGAGATGTTTTATCATCATACATCACGGCCATCAAAAATTCCTCTGTT  
 CTGGAACAGAGCTTCTGAGAGCCATCCTCGCAGAGTTCGTCGATCAGGACTGGAGGAA  
 GCCACGTTTCAACAGATATATAGTCAACATGTGGCACTGTGCAGAATGGAGGGACTGCCG  
 TACCCACCATGTGAGAGCCATGGCCGTGTGTTCTCACCTGGGCTCCTGTGCCTCCTG  
 CTTGTGGAGCCCAGCAGGAACGATCTGCTCCTTCGGGTGCGGCTCAACGTGAGCCAGGAT  
 GATGTGCTGTATGCGCTGAAAGACGAGTAAAGGGGCTTCAAGTTAAAAGACTGGGGTC  
 TTGCTGGGTTTTGTTTTTGTGAGACGGGGTCTTGTCTGTGCGCCAGGCTGGAGTGCAGTG  
 GCACGATCATGGTCACTGCAGCCTTACTTCTCAGGCTTAGGTGACCCCCAACCTCAT  
 CCTCCCGGGTGGCTGAAACTACAGGCACATGCCACCATGCCAGCTGATTTTTTTGTAGAG  
 ACAGGGTTCACCATGTTGCCAAGCTAGTCTACAAGCATCTGATTTTTGGAAGTACATGG  
 AATTGTTGTAACAAAGTATATTGAATGGAATGGCTCTCATGATTTTTGGAATTTTCCAT  
 TAAATAATTTGCTTTTTCTAA  
 AAAAAAAAAAAAAAAAAA

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_004153 unedited  
 GTTTTTATTTTGTATACCACTCATATAGCGGCCGCGTATTCACATGCTGGTACCGGCTC  
 CGGTAATTCGCCGGATATCGTTCGACCCACGCGTCCGCTTTGGTCTCGGCTTTCGGCCCGT  
 AGTTGTAGAAGGAGCCCTGCTGGTGCAGGTTAGAGGTGCCGCATCCCCGGAGCTCTCGA  
 AGTGGAGGCGGTAGGAAACGGAGGGCTTGC GGCTAGCCGGAGGAAGCTTTGGAGCCGGCC  
 ATGGCACACTACCCACAAGGCTGAAGACCAGAAAACTTATTCATGGGTTGGCAGGCC  
 TTGTTGGATCGAAAACTGCACTACCAACCTATAGAGAAATGTGTGAAAAACAGAAGGT  
 TGTTCACCGAGATTCACATCCAGATTGGACAGTTTGTGTTGATTGAAGGGGATGATGAT  
 GAAAACCCGATGTTGCTAAATTGCTTGAGTTGTTGGAAGATGACTCTGATCCTCCTCCT  
 AAGACACGTGCTCGAGTACAGTGGTTTTGTCGATTCTGTGAAGTCCCTGCCTGTAACGG  
 CATTTGTTGGGCCGGAAGCCTGGTGCACAGGAAATATTCTGGTATGATTACCCGGCCTGT  
 GACAGCCACATTAATGCGGAGACCATCATTGGCCTTGTTCGGGTGATACCTTTAGCCCCA  
 AAGGATGTGGTACCGACGAATCTGAAAATGAGAAGACTCTTTGTGAACTATCCTGGA  
 ATGAGAAGAAATCAGGCCCTTTTCTCAGAACTATTTTGGGGTTGAATAAACCAAGA  
 GAGTGCAGCCAGTGCCAAAAACCTGAGAGCCAGGATTAAGTGCAAAGAGCCTTCTTG  
 GACCCCCAAAACCTGGTGCCCAAGGATGGATCAAGGCACTCCGCTTCAAATTTGGCCAAA  
 TTCTACCCATCCTTTACCCAAGA

**Restriction Sites:**

Please inquire

**ACCN:**

NM\_004153

**Insert Size:**

3100 bp

<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>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>	<a href="#">NM_004153.2</a> , <a href="#">NP_004144.2</a>
<b>RefSeq Size:</b>	3180 bp
<b>RefSeq ORF:</b>	2586 bp
<b>Locus ID:</b>	4998
<b>UniProt ID:</b>	<a href="#">Q13415</a>
<b>Cytogenetics:</b>	1p32.3
<b>Protein Families:</b>	Stem cell - Pluripotency
<b>Protein Pathways:</b>	Cell cycle
<b>Gene Summary:</b>	<p>The origin recognition complex (ORC) is a highly conserved six subunits protein complex essential for the initiation of the DNA replication in eukaryotic cells. Studies in yeast demonstrated that ORC binds specifically to origins of replication and serves as a platform for the assembly of additional initiation factors such as Cdc6 and Mcm proteins. The protein encoded by this gene is the largest subunit of the ORC complex. While other ORC subunits are stable throughout the cell cycle, the levels of this protein vary during the cell cycle, which has been shown to be controlled by ubiquitin-mediated proteolysis after initiation of DNA replication. This protein is found to be selectively phosphorylated during mitosis. It is also reported to interact with MYST histone acetyltransferase 2 (MyST2/HBO1), a protein involved in control of transcription silencing. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jun 2010]</p> <p>Transcript Variant: This variant (1) is the longest transcript and encodes the longer isoform (1).</p>