

## Product datasheet for **RR200117**

### Sp7 (NM\_181374) Rat Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Sp7 (NM_181374) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sp7
Synonyms:	Osx
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RR200117 representing NM_181374 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGGCGTCCTCTCTGCTTGAGGAAGAAGCTCACTATGGCTCCAGTCCCCTGGCCATGCTGACAGCAGCCT  
GCAGCAAGTTTGGTGGCTCCAGCCCTCTCGGAGACTCAACAGCCCTGGGAAAAGGAGGCACAAAGAAGCC  
ATACACTGACCTTCAGCCCCAAAACCATGGGGGACGCCTACCCAGCTCCCTTCTCAAGCACCAATGGA  
CTCCTCTCCCCTGCAGGCAGTCCCCCGGCCCGGCCTCTGGCTATGCCAATGACTACCCACCCCTTCCCC  
ACTCATTTCTGGGCCACTGGTGCCAAAGACCCGGGGCTGCTGGTGCCGAAGGGGCACAGCTCTTCTGA  
CTGCCTGCCTAGTGTCTACACGTCTTGGATATGTCCCATCCCTACGGCTCCTGGTACAAGCGGGCATC  
CATGCAGGCATCTCACCAGGTCTGGCAACACTCCTACCCTTGGTGGGACATGCACCCTGGGGCAATT  
GGTTAGGTGGTGGGCAGGGCCAGGGTGTGGGCTGCAAGGGACTGTCCACAGGCCCTGCCAGCCTCC  
ACTGAACCCAGCTGCCTACTTACCCGTCTGACTTTGCCCCCTTAACCCAGCTCCCTATCCAGCACCC  
CACCTCTTGCAACCAGGTCCCAGCATGTCTACCCCAAGATGTCTATAAGCCCAAGGCAGTTGGCAATA  
GTGGGCAACTGGAGGGAGTGGTGCAGGCAAACCTCCCCGGGGTGCAGGCACAGGGGGCAGTGGTGATA  
TGCAGGCAGTGGGGCAGGGCTTCTACCTGCGACTGCCCAACTGTCAGGAGCTAGAGCGGCTGGGGCA  
GCAGCGGCTGGGCTGAGGAAGAAGCCATTACAGCTGCCACATCCCCGGCTGCGCAAGGTGTACGGCA  
AGGCTTCGCATCTGAAAGCCACTTGGCTGGCAGACTGGCGAGAGGCCTTTCGCTGCAACTGGCTTTT  
CTGTGGCAAGAGGTTACCCGCTCTGACGAGCTGGAGCGCCACGTGCGCACTCACACCCGGGAGAAGAAG  
TTCACCTGTCTGCTCTGCTCCAAGCGCTTACCCGAAGCGACCACTTGAGCAAACATCAGCGCACCCACG  
GGGAGCCAGTCCCGGGCCGCCCAAGTGCCCTAAGGAGCTGGGGAGGGTCGACGCTCGGGGAAGA  
AGAAGCCAATCAGCCGCCCGATCTTCCACCTCGCTGCACCCCAAGAAAAGCCCTGGAGGCAGCCCA  
GAGCAGAGCAACCTGCTAGAGATC

**ACGCGT**ACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RR200117 representing NM\_181374  
 Red=Cloning site Green=Tags(s)

MASSLLEEEAHYGSSPLAMLTAACSKFGGSSPLRDSTALGKGGTKKPYTDL SAPKTMGDAYPAPFSSTNG  
 LLSPAGSPPAPASGYANDYPPFPHSFGPTGAQDPGLLVPKGHSSDCLPSVYTSLDMSHPYGSWKAGI  
 HAGISPGPGNTPTPWDMHPGGNWLGGGQGGDGLQGLTSTGPAQPLNPQLPTYP SDFAPLNPAPYPAP  
 HLLQPGPQHVL PQDVYKPKAVGNSGQLEGSAGKPPRGAGTGGSGGYAGSGAGRSTCDCPNCQELERLGA  
 AAAGLRKKPIH SCHIPGCGKVYKASHLKAHLRWHTGERPFV CNWLF CGKRFTRSELELRHVRHTREKK  
 FTCLLCSKRFTRSDHLSKHQRTHGEPGPPPSGPKELGEGRSVGE EEA NQPPRSSTSPAPPEKAPGGSP  
 EQSNLLEI

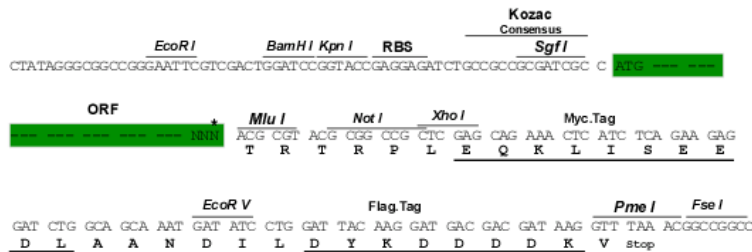
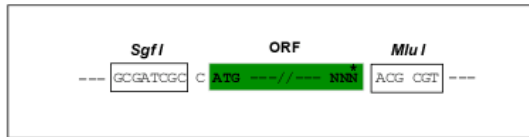
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

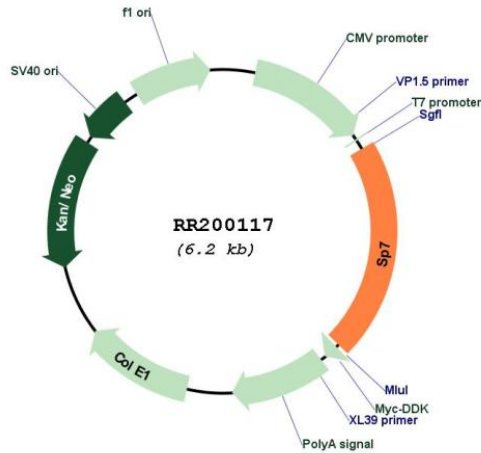
Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN:

NM\_181374

<b>ORF Size:</b>	1284 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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_181374.2</a> , <a href="#">NP_852039.2</a>
<b>RefSeq Size:</b>	1385 bp
<b>RefSeq ORF:</b>	1287 bp
<b>Locus ID:</b>	300260
<b>Cytogenetics:</b>	7q36
<b>MW:</b>	44.6 kDa
<b>Gene Summary:</b>	may act as a transcription factor; mouse homolog is required for bone formation and osteoblast differentiation [RGD, Feb 2006]