

## Product datasheet for **RC209154**

### SP1 (NM\_138473) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SP1 (NM_138473) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC209154 representing NM\_138473.  
 Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGAGCGACCAAGATCACTCCATGGATGAAATGACAGCTGTGGTAAAAATTGAAAAAGGAGTTGGTGCC
AATAATGGGGCAATGGTAATGGTGGTGGCTTTTTCACAGGCTCGAAGTAGCAGCACAGGCAGTAGC
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AGAATTGAGTCACCCAATGAGAACAGCAACAACCTCCAGGGCCCGAGTCAGTCAGGGGGAACAGGTGAG
CTTGACCTCACAGCCACACAACCTTTCACAGGGTGCCAATGGTGGCAGATCATCTCTTCTCTCTGGG
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TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

Protein Sequence: >Peptide sequence encoded by RC209154  
 Blue=ORF Red=Cloning site Green=Tag(s)

MSDQDHSMDMTAVVKIEKGVGGNNGGNGGGGAFSQRSSSTGSSSSTGGGGQESQPSPLALLAATCS  
 RIESPNENSNNNSQGPSQSGGTGELDLTATQLSQGANGWQIISSSSGATPTSKEQSGSSTNGSNGSESSK  
 NRTVSGGQYVVAAPNLQNOQVL TGLPGVMPNIQYQVIPQFQTVDGQQLQFAATGAQVQDGGSGQIQII  
 PGANQQIITNRGSGGNI IAAMPNLLQQA VPLQGLANNVL SGQTQYVTNVPVALNGNITLLPVNSVSAAT  
 LTPSSQAVTISSSGSQESGSPVTS GTTISSASLVSSQASSSFFTNANSYSTTTTTSNMGIMNFTTSG  
 SSGTNSQGQTPQRVSGLQGS DALNIQQNQTS GGS LQAGQKQEGEQNQQTQQQIILIQPQLVQGGQALQA  
 LQAAPLSGQFTTTQAISQETLQNLQLQAVPNSGPIIIRTPTVGPNGQVSWQTLQLQNLQVQNPQAQTIT  
 LAPMQGVS LGQTS SNTLTP IASAA SIPAGTVTVNAAQLSSMPGLQTINLSALGTSGIQVHP IQGLPL  
 AIANAPGDHGAQLGLHGAGGDGIHDDTAGGEEGENSPDAQPQAGRRTREACTCPYCKDSEGRGSDPG  
 KKKQHICHIQGCGK VYK TSHLRAHLRWH TGERPFMCTWSYCGKRFTRSD ELQRHKRHTHGEKFFACPE  
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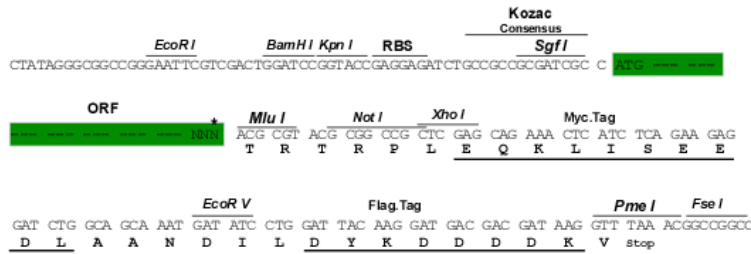
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mg2576\\_f01.zip](https://cdn.origene.com/chromatograms/mg2576_f01.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



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

ACCN: NM\_138473

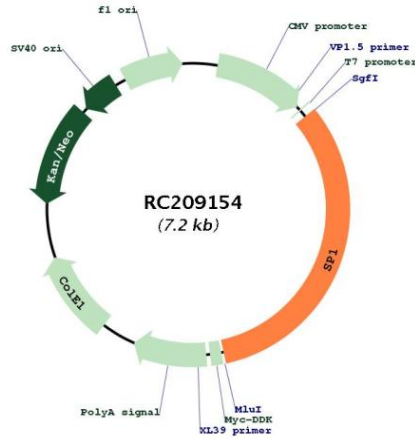
ORF Size: 2355 bp

<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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></p>
<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>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_138473.3</a>
<b>RefSeq Size:</b>	7667 bp
<b>RefSeq ORF:</b>	2358 bp
<b>Locus ID:</b>	6667
<b>UniProt ID:</b>	<a href="#">P08047</a>
<b>Cytogenetics:</b>	12q13.13
<b>Protein Families:</b>	Druggable Genome, ES Cell Differentiation/IPS, Stem cell - Pluripotency, Stem cell relevant signaling - JAK/STAT signaling pathway, Transcription Factors
<b>Protein Pathways:</b>	Huntington's disease, TGF-beta signaling pathway
<b>MW:</b>	80.7 kDa

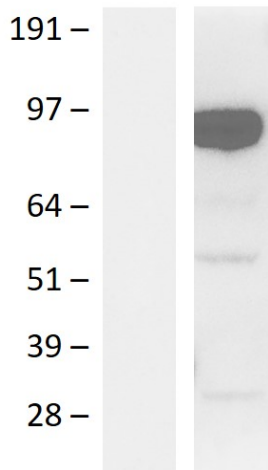
**Gene Summary:**

The protein encoded by this gene is a zinc finger transcription factor that binds to GC-rich motifs of many promoters. The encoded protein is involved in many cellular processes, including cell differentiation, cell growth, apoptosis, immune responses, response to DNA damage, and chromatin remodeling. Post-translational modifications such as phosphorylation, acetylation, glycosylation, and proteolytic processing significantly affect the activity of this protein, which can be an activator or a repressor. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2014]

**Product images:**



Circular map for RC209154



Western blot validation of overexpression lysate (Cat# [LY408596]) using anti-DDK antibody (Cat# [TA592569]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209154 using transfection reagent PEI.