

## Product datasheet for **RC212274**

### SP100 (NM\_001080391) Human Tagged ORF Clone

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids                         |
| Product Name:             | SP100 (NM_001080391) Human Tagged ORF Clone |
| Tag:                      | Myc-DDK                                     |
| Symbol:                   | SP100                                       |
| Synonyms:                 | lysp100b                                    |
| Mammalian Cell Selection: | Neomycin                                    |
| Vector:                   | pCMV6-Entry (PS100001)                      |
| E. coli Selection:        | Kanamycin (25 ug/mL)                        |



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**ORF Nucleotide Sequence:**

>RC212274 representing NM\_001080391  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCAGGTGGGGCGGCGACCTGAGCACCAGGAGGCTGAATGAATGTATTTACCAGTAGCAAATGAGA  
 TGAACCATCTTCCTGCACACAGCCACGATTTGCAAAGGATGTTACGGAAGACCAGGGTGTAGATGACAG  
 GCTGCTCTATGACATTGTATTCAAGCACTTCAAAAAGAAATAAGGTGGAGATTTCAAATGCAATAAAAAAG  
 ACATTTCCATTTCGAGGGCCTCCGTGATCGTGATCTCATCACAATAAAATGTTTGAAGATTCTCAAG  
 ATTCTTGTAGAAACCTGGTCCCTGTACAGAGAGTGGTGTACAATGTTCTTAGTGAAGTGGAGAAGACATT  
 TAACCTGCCAGTCTGGAAGCACTGTTACAGCGATGTCAACATGCAGGAATACCCCGATTTAATTCACATT  
 TATAAAGGCTTTGAAAATGTAATCCATGACAAATTCCTCTCCAAGAAAGTGAAGAAGAAGAGGGGAGG  
 AGAGGTCTGGCCTCCAATAAGTCTTGAACAAGGAAGTGGTGAAGTCTTTTCGAAGCCTGACTTGGCC  
 ACCTTCGGGTTCCCATCTCATGCTGGTACAACCCACCTGAAAATGGACTCTCAGAGCACCCCTGTGAA  
 ACGAACAGATAAATGCAAAGAGAAAAGATACAACCAAGTACAAAAGATGATTCGCTAGGAAGCCAACAAA  
 CAAATGAACAATGTGCTCAAAGGCTGAGCCAACAGAGTCTGCGAACAATTTGCTGTCCAAGTGAATAA  
 TGGGGATGCTGGAAGGGAGATGCCCTGCCCGTTGCCCTGTGATGAAGAAAGCCAGAGGCAGAGCTACAC  
 AACCATGGAATCCAAATTAATTCCTGTTCTGTGCGACTGGTGGATATAAAAAAGGAAAAGCCATTTTCTA  
 ATTCAAAAGTTGAGTGCCAAGCCCAAGCAAGAAGTCAATACATAACCCAGGCATCTGACATAATAGTCATCAG  
 CAGTGAGGACTCTGAAGGATCCACTGACGTTGATGAGCCCTTAGAAGTCTTCATCTCAGCACCGAGAAGT  
 GAGCCTGTGATCAATAATGACAACCTTTAGAATCAAATGATGAAAAGGAGGGCCAAAGAAGCCACTGTCT  
 CACGACCCAGATTGTACAGAGCCCATGGATTTTCAGAAAATTAATCTACATTCAGAGAAAAGTTTAAAGAA  
 AAGAGTGATAGGACAAGACCACGACTTTTCAGAAATCCAGTGAGGAGGAGGCGCCCGCAGAAGCCTCGAGC  
 GGGCACTGAGAAGCAAGCATGGTGAGAAGGCTCCTATGACTTCTAGAAGTACATCTACTTGGAGAATAC  
 CCAGCAGGAAGAGACGTTTCAGCAGTAGTACTTTTCAGACCTGAGTAATGGAGAAGAGCTTCAGAAAAC  
 CTGCGACTCATCCCTAAGAAGAGGGTCAAGGATCACAGCCACAAGAAGCTGAAAATGAAGAGTCTCCTGT  
 GTCATGTGTTTTCCAAAAGGTGTGCAAGAAGCCAAAGAAGCAAGGACTGAAAGTGTCAAGCATCTGACA  
 TGATGGATACCATGGATGTTGAAAACAATTCTACTTTGGAAAAACACAGTGGGAAAAGAAGAAAAAGAG  
 AAGGCATAGATCTAAAGTAAATGGTCTCCAAGAGGGAGAAAAGAACAGACCTAGAAAACATTTAACT  
 CTGAATAACAAAGTCCAAAAGAAAAGATGGCAACAAGAGGAAGAAAAGCCAACTAGACCTTTGAAA  
 GAAGAAGAAAAGAGGTCCAAGAATTCCAAAGATGAAAATATAATTTTAAACAATCTGAACCTCCTGT  
 GACCTGTGGTGAGGTGAAGGGCACTCTATAAAGGAGCGATTCAAACAAGGAACCTCAAAGAAGTGTATA  
 CAGAGTGAGGATAAAAAGTGGTTCACTCCAGGGAATTTGAAATGAAGGAGACCAGGAGCATCCAAGA  
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 AACTCAAATATATGTGAGGTGTGCAACAATGGGACGGCTGTTCTGCTGCGACTTGTCCAAGATCCT  
 TTCATGAGCACTGCCACATCCATCCGTGGAAGCTAACAAGAACCCTGGAGTTGCATCTCTGCAAGGAT  
 AAAGACTATTCAGGAAAGATGCCAGAAAAGCCAAATCAGGTCATCAGGAATCTGAAGTCTGATGAGGCAG  
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 AGTCAAGACAAGTTTGAATGAGCAGATGTACCCCGAGTAGAAGGGTTTGTGAGGACATGCGTCTCATC  
 TTTCATAACCACAAGGAATTTTACAGGGAAGATAAATTCACCAGACTGGGAATTCAGTACAGGACATCT  
 TTGAGAAGAATTCAGAAAATTTTGAATTCAGGAAACAAGCAAGAACATTATAATGTTTATT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC212274 representing NM\_001080391  
 Red=Cloning site Green=Tags(s)

MAGGGDLSTRRLNECISPVANEMNHLPAHSHDLQRMFTEDQGVDRLLYDIVFKHFKRNKVEISNAIKK  
 TFPFLEGLRDRDLITNKMFEQSQSCRNLVPVQRVYVNVLSELEKTFNLPVLEALFSDVNMQEYPLIHI  
 YKGFENVIHDKLPLQESEEEEREERSGLQLSLEQGTGENSFRSLTWPPSGSPSHAGTTPPENGLSEHPCE  
 TEQINAKRKDTSKDDSLGSQQTNEQCAQKAEPTECEQIAVQVNNGDAGREMPCLPCDEESPEAELH  
 NHGIQINSCSVRLVDIKKEKPFNSKVECAQARTHHNQASDIIVISSEDESEGSTDVDEPLEVVISAPRS  
 EPVINNDNPLESNDEKEGQEAATSRPQIVPEPMDFRKLSFRSEFKKRVIGQDHDFSESSEEEAPEASS  
 GALRSKHGEKAPMTRSTSTWRIPSRKRRFSSSDFSDLSNGEELQETCSSSLRRGSGSQPQEPENKCKSC  
 VMCFPKGVPRSQEARTESSQASDMMTMDVENNSTLEKHSKRRKRRHRKSVNGLQRGRKKDRPRKHLT  
 LNNKVQKRWQQRGRKANTRPLKRRRKRGPRIKDENINFKQSELVTCGEVKGTLTKERFKQGTSKKCI  
 QSEDKWFTPREFEIEGDRGASKNWKLSIRCGGYTLKVLNENKFLPEPPSTRKKRILESHNNTLVDPCE  
 NSNICEVCNKWGRLFCDCPRSFHEHCHIPSVEANKNPWSCIFCRIKTIQERCPESSQSGHQESELVLRQ  
 MLPEEQKCEFLLLKVYCDKSCFFASEPYNREGSQGPQKPMWLNKVKTSLEQMYTRVEGFVQDMRLI  
 FHNHKEFYREDKFTRLGIQVQDIFEKNFRNIFAIQETSNIIMFI

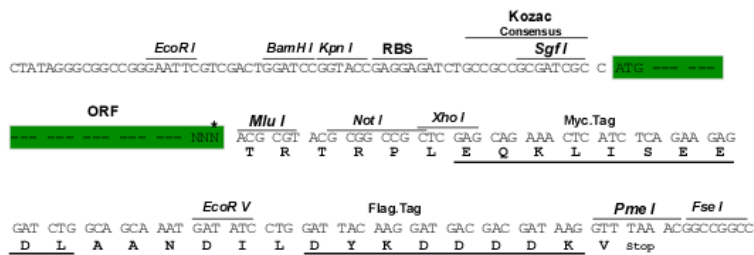
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk8026\\_c04.zip](https://cdn.origene.com/chromatograms/mk8026_c04.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:

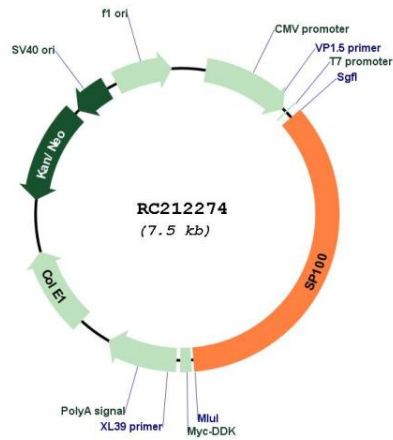
Cloning sites used for ORF Shuttling:



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

|                               |  |
|-------------------------------|--|
| <b>ACCN:</b>                  | NM_001080391   |
| <b>ORF Size:</b>              | 2655 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_001080391.2</a>   |
| <b>RefSeq Size:</b>           | 5455 bp  |
| <b>RefSeq ORF:</b>            | 2658 bp  |
| <b>Locus ID:</b>              | 6672   |
| <b>UniProt ID:</b>            | <a href="#">P23497</a>   |
| <b>Cytogenetics:</b>          | 2q37.1   |
| <b>Protein Families:</b>      | Transcription Factors  |
| <b>MW:</b>                    | 101.4 kDa  |
| <b>Gene Summary:</b>          | This gene encodes a subnuclear organelle and major component of the PML (promyelocytic leukemia)-SP100 nuclear bodies. PML and SP100 are covalently modified by the SUMO-1 modifier, which is considered crucial to nuclear body interactions. The encoded protein binds heterochromatin proteins and is thought to play a role in tumorigenesis, immunity, and gene regulation. Alternatively spliced variants have been identified for this gene; one of which encodes a high-mobility group protein. [provided by RefSeq, Aug 2011] |

Product images:



Circular map for RC212274