

## Product datasheet for **RC239853**

### SENP7 (NM\_001282801) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SENP7 (NM_001282801) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SENP7
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

**ORF Nucleotide Sequence:**

>RC239853 representing NM\_001282801  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGACAAGAAAAGCTCGGGCAGCGCCATCTTCATCCGAAATCATCACAGAAGAAAAAGGAAAAAGT  
 CATCTTCTGATTTATCGGAGATAAGAAAGATGTTAAATGCAAAACCAGAGGATGTCCATGTTCAATCACC  
 ACTGTCCAAATTCAGAAGCTCAGAACGCTGGACTCTCCCTTTCAGTGGGAAAGAAGCCTAAGGAATAAA  
 GTCATCTCTCTAGACCATAAAAAATAAAAAACATATCCGAGGGTGTCTGTACTTCCAAGTCATCACCAG  
 AAAGGATACCCAGAGTTATATTGACGAATGCTCTGGGAACGGAGTTAGGAAGAAAATACATAAGGACCCC  
 ACCTGTAAGTGAAGGAAAGTTGAGTGATACAGACAACCTGCAATCAGAGCAACTTCTTCATCATCTGAT  
 GGCAGCCTAGAATCTTATCAAAATCTAAACCTCACAGAGCTGTTATTTATCTGAAAGGGGCTCACAAC  
 GAAGTAAGACAGTAGATGACAATCTGCAAGCAGACTGCGCACAATAAGAAAAACGAAGAAAGGATGA  
 TGGCATTCTCTTTAATATCTGATACTCAGCCTGAAGACCTAACAGTGAAGTGAAGGTTGTGATCAT  
 CTGCAACAGGAAAGCAGAAACAAGGATGTTAAATATTCTGATTCAAAAGTGAAGTCACTCTGATTCCG  
 GGAAGACAAGAGAAGGCTTAGAAATAATTTACCTGATTCTCAATATTGTACTTCTTTGGATAAGTCAAC  
 AGAACAGACAAAAACAAGAAGATGACTCAACAATATCCACTGAGTTTGGAAAGCCAAGTAAAACAT  
 CATCAGGATCCAAAACCTGCTGAAGAAATTACAATAAACCTACAAAAGTGAATTTACTAAACTATCCT  
 CACTTAACAGTCAGGAGTTGACTTTGAGTAATGCCACCAAAAAGTGCCTCTGCCGTTCAACCCTGAAAC  
 CGTTGAGAAGTCTAATCCATTGATATTGTGGGATTTCTCCCTGGTTGAGAAGGATGAGAATGAGTTG  
 AATACCATAGAAAAGCCTATTCTAAGAGGACATAATGAAGGAACCAATCACTGATCTCAGCTGAACCAA  
 TTGTTGTTCCAGTGATGAAGAAGGACCTGTTGAACATAAAAAGTTCAGAAATCTTAAGTTACAATCTAA  
 GCAAGACCGTGAGACAATAATGAAAATGAGAGTACTTCTGAATCAGCATTGTTAGAAGTCACTGATTG  
 ACATGTGAATCTGTACAGATGTCATCTGAATTATGCCATATAATCCTGTGATGGAGAACATTTCCAGTA  
 TTATGCCTAGTAATGAGATGGATCTACAACCTGGATTTTATATTTACTTCTGTTTATATTGGTAAAAATAA  
 AGGAGCTTCTAAAGTTGTGTTACAATCACAAAAAATATATTAAGATCCCATTTCAGTGTCCCTGAAT  
 GAGATTTCAATGCTAGTGGATACCACACATTTAAAGCGTTTGGGTTATGGAAAAGTAAAGGATGATAATC  
 ACAGTAAAAGGAGTCATGCTATTCTTTCTCTGGGTCTCTTCAGATTATCTTCAAGAGATTCAGACCCA  
 ATTAGAACACTCTGTATTAAGCCAGCAATCAAAATCTAGTGAATTCATTTTCTTGAAGTACACAATCCT  
 GTTTCACAAAAGAGAAGAAATTGAAGCTGAAAGATATTATGACGGAATAAGTATAATCAGTGGAGAATTAG  
 AGCTTTCTTACCCGTTGTCTGGGTTCCAGGCATTTCTTTGTTTCAGAACCTCTCTTCAAAAGAAAGTTC  
 TTTTATTCATTACTGTGTTCAACTGTTCTTTCCCTGTGTTGCTGTTGCTGAAAGAAATGAAG  
 CTGAAATCAGTATCTCAGCCCTCAAACACAGATGCGGCCAAGCCTACTTACACCTTCTGCAGAAGCAAA  
 GTAGCGGTTGCTACTCCCTTTCTATTACATCTAATCCAGATGAAGAAATGGCGAGAAGTCAGGCACACTGG  
 ACTTGTTCAGAAGTTGATTGTATATCCTCCACCACCTACTAAGGGGGGATTAGGAGTAACTAATGAAGAT  
 CTGGAGTGTGTTAGAAGAAGGAGAGTTTCTAATGATGTAATCATTGATTTTACCTTAAGTATCTTATAT  
 TGGAGAAGGCATCAGATGAACCTGTTGAACGAAGTCACATTTTGTAGTCTTTTCTATAAATGCTTGAC  
 AAGAAAAGGAAAAAATTTAACAGAAGATAATCCAAATCTTTCAATGGCACAGAGAAGACATAAAAGAGTA  
 AGAACATGGACTCGTCACATAAACATTTTAAATAAAGATTACATCTTTGTACCTGTAATGAGTCGTCCTC  
 ACTGGTATCTCGCAGTCAATTTGTTTTCCATGGTTAGAAGAAGCTGTGATGAAGATTTTCCACAACTGT  
 ATCCCAGCAGTCCAGGCTCAGCAGTCCCAAAATGACAACAAAACAATAGATAATGATCTACGTAATCTACT  
 TCGACACTGTCTTTGAGTGCAGAGGATCCCAAAGTACCGAGTCGAATATGTCAGTACCAAGAAAAATGT  
 GTAAAAGGCCATGTATTCTTATACTAGACTCCTTGAAAGCTGCTCTGTACAAAACACAGTTCAGAAATTT  
 ACGAGAGTATTTAGAGGTAGAGTGGGAAGTTAAACTAAAACTCATCGTCAATTCAGCAAAAACAACATG  
 GTGGATCTATGCCCTAAAGTTCCAAACAGGACAATAGCAGTATTGTGGAGTATATTTATTGCAGTATG  
 TGGAAAGCTTCTCAAGGATCCTATTGTTAACTTTGAACTTCCAATTCATTTGGAGAAGTGGTTCTCTCG  
 TCATGTAATAAAGACCAACGGGAAGATATTGAGAGCTCATCTTGAAGTTCATTTACAGCAACAGAAG  
 GGCAGCAGTAGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC239853 representing NM\_001282801  
 Red=Cloning site Green=Tags(s)

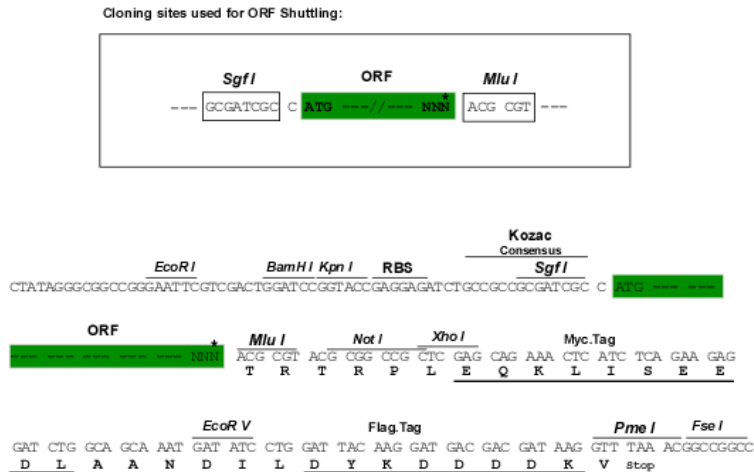
```
MDKRKLGRRPSSSEIITEGKRKKSSSDLSEIRKMLNAKPEDVHVQSPLSKFRSSERWTLPLQWERSLRNK
VISLDHKNKKHIRGCPVTSKSSPERIPRVILTNLGTELGRKYIRTPVTEGSLSDTNLQSEQLSSSSD
GSLESYQNLNPHKSCYLSERGSQRSKTVDDNSAKQTAHNKEKRRKDDGISLLISDTPEDLNSGSRGCDH
LEQESRNKDVKYSDSKVELTLISRKTKRRLRNLPDSQYCTSLDKSTEQTKKQEDDSTISTEFKPSENY
HQDPKLPPEIITTKPTKDFTKLSSLNSQELTSLNATKSASAGSTTETVENSNSIDIVGISSLVEKDENEL
NTIEKPILRGHNEGNQSLISAEPVVSSDEEGPVEHKSSEILKLSKQDRETTNENESTESALLELPLI
TCESVQMSSELCPYNPMENISSIMPSNEMDLQDFIFTSVYIGKIKGASKGCVTITKKYIKIPFQVSLN
EISLLVDTHLKRFLGWKSKDDNHSKRSHAILFFWSSDYLQEIQTQLEHVSLSQQSKSSEFIFLELHNP
VSQREELKLDIMTEISIIISGELELSYPLSWVQAFPLFQNLSSKESFIIHYCVSCTCFPAGVAEEMK
LKSVSQPSNTDAAKPTYFLQKQSSGCYLSITSNPDEEWREVRHTGLVQKLIYVPPPTKGGLGVTNED
LECLEEGEFLNDVIIDFYLYKYLEKASDELVERSHIFSSFFYKCLTRKENNLTEDPNLSMAQRHRKRV
RTWTRHINIFNKDYIFVPVNESSHWYLAVICFPWLEEAIVEDFPQTVSQSQAAQSQNDNKIDNDLRTT
STLSLSAEDSQSTESNMSVPKMKCRPCILILDLSLKAASVQNTVQNLREYLEVEWEVKLKTTRQFSKTM
VDLCPKVPKQDNSSDCGYLLQYVESFFKDPVNFELPIHLEKWFPRHVIKTKREDIRELILKLHLQOQK
GSSS
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

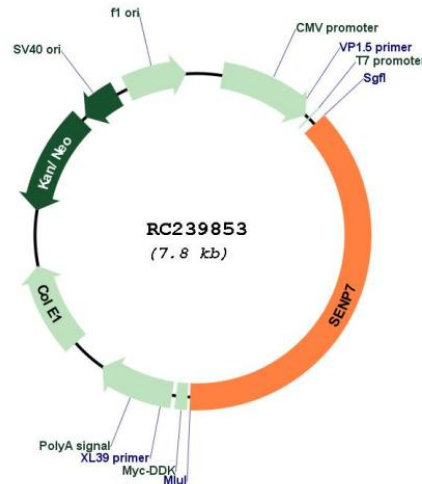
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



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

**Plasmid Map:**


**ACCN:** NM\_001282801

**ORF Size:** 2952 bp

**OTI Disclaimer:** 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. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**Components:** 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).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
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.

**RefSeq:** [NM\\_001282801.2](#)

**RefSeq Size:** 4820 bp

**RefSeq ORF:** 2955 bp

**Locus ID:** 57337

**UniProt ID:** [Q9BQF6](#)

**Cytogenetics:** 3q12.3

**Protein Families:** Druggable Genome, Protease

**MW:** 112.6 kDa

**Gene Summary:** The reversible posttranslational modification of proteins by the addition of small ubiquitin-like SUMO proteins (see SUMO1; MIM 601912) is required for many cellular processes. SUMO-specific proteases, such as SENP7, process SUMO precursors to generate a C-terminal diglycine motif required for the conjugation reaction. They also display isopeptidase activity for deconjugation of SUMO-conjugated substrates (Lima and Reverter, 2008 [PubMed 18799455]).[supplied by OMIM, Jun 2009]