

## Product datasheet for **SC316860**

### SENP6 (NM\_001100409) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SENP6 (NM_001100409) Human Untagged Clone
Tag:	Tag Free
Symbol:	SENP6
Synonyms:	SSP1; SUSP1
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001100409, the custom clone sequence may differ by one or more nucleotides

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ATGGCGGCCGGCAAGAGCGGCGGTAGCGCAGGGGAGATTACTTTTCTGGAAGCTTTGGCT
AGATCAGAGTCTAAGAGAGATGGAGTTTTAAAAATAATTGGAGCTTTGATCATGAAGAA
GAAAGTGAAGGAGATACAGATAAAGATGGGACAAATCTGCTCAGTGTGGATGAAGATGAG
GATTCTGAAACCTCAAAAGGAAAAAAGTTAAATCGTCGATCTGAAATTGTTGCTAATAGC
TCTGGTGAATTCATCTTGAAGACATATGTAAGACGAAACAAGTCTGAAAGTTTTAAACT
TTGAAAGGCAACCCAATTGGACTTAACATGTTGAGCAACAATAAGAAATTGAGTGAAAT
ACGCAAAATACGTCATTATGTTCTGGAAGTGTAGTTTCATGGTAGACGTTTTTCATCATGCT
CATGCACAGATACCAGTAGTAAAAACAGCAGCCAAAGGAAAGAATACCCACCTCATGTC
CAAAAAGTTGAAATTAATCCTGTAAGGTTAAGTCGGCTCCAAGGTGTTGAACGTATAATG
AAGAAAACAGAAGAGTCCGAATCACAAGTGGAGCCTGAAATTAAGAGGAAAGTACAACAG
AAACGACACTGTAGTACCTATCAGCCTACTCCTCCTCTATCTCCTGCTTCAAAAAATGT
TTAACCATTTAGAGGATTTGCAAAGAAATTCAGACAAGCTATTACTTTGAATGAGTCT
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CAGTTTGGCAATTCTATTATCAACACACCTCTGAAACGTCGTAAGTGTTTTCTCAAGAA
CCTCCAGATGCTTTAGCTTTAAGCTGCCAAAGTTCCTTTGACAGTGTCAATTTAACTGT
CGAAGTATACGAGTAGGAACACTCTCCGGCTGTTAATAGAGCCTGTAATTTTTTTGTTA
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ACCTCTGATCTAACTAAATGTGAATGGTGAATGTCCGAAAATTACCTGTAGTGTTCCT
CAAGCAATTCAGCAGTTTATCAAAAGCTGAGCATCCAATGCAAATGAATAAGGAGGAT
AAAGTTTGGAAATGATTGTAAAGGAGTAAATAAATTAACAAATTTAGAAGAACAATATATA
ATTTTAATTTTTCAAAATGGCCTTGATCCTCCGGCAAATATGGTATTTGAAAGTATCATT
AATGAAATTGGTATAAAGAATAACATCTCCAATTTTTTTGCGAAAATTCCTTTGAAGAA

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GCTAATGGCAGACTTGTTGCCTGTACAAGAACCTATGAAGAGAGCATCAAAGGAAGTTGT  
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 AAACAAGAATTTTCAGTTTTTGTATGAAGAAGAAGAACTGGAGAAAACACACCATCTTC  
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 GTTACCAATGAGGACCTGCAGTGTCTAAATGAAGGAGAATTTTTAAATGATGTTATTATA  
 GACTTTTTATTTGAAATACTTGGTGCTTGAAAACTGAAGAAGGAAGACGCTGACCGAATT  
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 GCGAGTAAAATGAAGAATCAATAAAGGAGAATCTACATCCAGAAAGTTGCTGATAGG  
 ACTAAAAGTGAGAATGGCCTACAGAATGAAAGTTAAGTCCACACATCATACAGATGGC  
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 TGTAACAACCTTGATCCTACTTATGGACTCACTCCGAGGCCCTTCTCGGTCAAATGTT  
 GTCAAAATTTAAGAGAGATTTAGAAAGTGAATGGGAAGTAAAAAGGAAGCAAAAAGA  
 AGTTTTTCAAAGATGTTATGAAGGGCTCTAATCCAAAAGTACCACAGCAAAAACAACTTC  
 AGTGACTGTGGTGTATGTATTGCAGTATGTAGAGAGCTTTTTGAGAATCCAATTCTC  
 AGTTTTGAACTACCTATGAATTTGGCAAACTGGTTTTCTCCACCAAGAATGAGAACAAAA  
 AGAGAAGAAATCCGAAACATAATTCTGAAGCTACAGGAAGATCAGAGCAAAAGAGAAAAGA  
 AAGCATAAGGACACTTACTCAACAGAAGCACCTTTAGGCGAAGGAACAGAACAATATGTC  
 AATAGTATCTCAGAT

- Restriction Sites:** Please inquire
- ACCN:** NM\_001100409
- OTI Disclaimer:** 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).
- OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
- 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:	<u>NM_001100409.1, NP_001093879.1</u>
RefSeq Size:	6624 bp
RefSeq ORF:	3318 bp
Locus ID:	26054
UniProt ID:	<u>Q9GZR1</u>
Cytogenetics:	6q14.1
Protein Families:	Druggable Genome, Protease
Gene Summary:	<p>Ubiquitin-like molecules (UBLs), such as SUMO1 (UBL1; MIM 601912), are structurally related to ubiquitin (MIM 191339) and can be ligated to target proteins in a similar manner as ubiquitin. However, covalent attachment of UBLs does not result in degradation of the modified proteins. SUMO1 modification is implicated in the targeting of RANGAP1 (MIM 602362) to the nuclear pore complex, as well as in stabilization of I-kappa-B-alpha (NFKBIA; MIM 164008) from degradation by the 26S proteasome. Like ubiquitin, UBLs are synthesized as precursor proteins, with 1 or more amino acids following the C-terminal glycine-glycine residues of the mature UBL protein. Thus, the tail sequences of the UBL precursors need to be removed by UBL-specific proteases, such as SENP6, prior to their conjugation to target proteins (Kim et al., 2000 [PubMed 10799485]). SENPs also display isopeptidase activity for deconjugation of SUMO-conjugated substrates (Lima and Reverter, 2008 [PubMed 18799455]).[supplied by OMIM, Jun 2009]</p> <p>Transcript Variant: This variant (2) lacks an alternate in-frame exon in the 5' coding region, compared to variant 1, resulting in a shorter protein (isoform 2), compared to isoform 1.</p> <p>Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>