

Product datasheet for **RG217424**

SENP6 (NM_001100409) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: SENP6 (NM_001100409) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: SENP6
Synonyms: SSP1; SUSP1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG217424 representing NM_001100409
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGATCGCC

ATGGCGGCCGGCAAGAGCGGCGGTAGCGCAGGGGAGATTACTTTTCTGGAAGCTTTGGCTAGATCAGAGT
 CTAAGAGAGATGGAGGTTTTAAAAATAATTGGAGCTTTGATCATGAAGAAGAAAGTGAAGGAGATACAGA
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 AGTCTGAAAGTTTTAAACTTTGAAAGGCAACCCAATTGGACTTAACATGTTGAGCAACAATAAGAAATT
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 CCTCCTCTATCTCCTGCTTCAAAAAATGTTTAACCCATTTAGAGGATTTGCAAAGAAATTCAGACAAG
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 CAGAGCGTGAACACGAAGCATTCCAGAAGACTCAGAGTTAAATACAGTTACATTGCCAAGAAAAGCAAG
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 AGACGAACCAGACCATGATCCTGTAGAGATTATATTAATACCTCTGATCTAACTAAATGTGAATGGTGT



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AATGTCCGAAAATTACCTGTAGTGTTCCTCAAGCAATCCAGCAGTTTATCAAAAAGCTGAGCATCCAAC
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 ATCAGAGCAAAGAGAAAAGAAAGCATAAGGACACTTACTCAACAGAAGCACCTTTAGCGGAAGGAACAGA
 ACAATATGTCAATAGTATCTCAGAT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG217424 representing NM_001100409
 Red=Cloning site Green=Tags(s)

MAAGKSGGSAGEITFLEALARSESKRDGGFKNNWSFDHEESEGDGDKDGTNLLSVDEDEDETSKGGKL
 NRRSEIVANSSGEFILKTYVRRNKSEFKTLKGNPIGLNMLSNNKLSSENTQNTSLCSGTVVHGRRFHHA
 HAQIPVVKTAQRKEYPPHVQKVEINPVRLSRLQGVVERIMKKTEESESQVEPEIKRKVQQKRHCSTYQPT
 PPLSPASKKCLTHLEDLQRNCRQAITLNESTGPLLRTSIHQNSGGQKSQNTGLTKKFKYGNVVEKVPIDI
 IVNCDDSKHTYLQTNQKILPGAKIPKITNLKERKTSLSLDNDPIILSSDDDDNDRTNRRESISPPQPAD
 SACSSPAPSTGKVEALNENTCRAERELRSIPEDSELNTVTLPRKARMKDQFGNSIINTPLKRRKVSQEQ
 PPDALALSCQSSFSDSVILNCRSIRVGTFRLLIEPVIFCLDFIKIQLDEPDHDPVEIILNTSDLTKCEWC
 NVRKLPVVFLQAIIPAVYQKLSIQLQMNKEDKVWVNDCKGVNKLNLNLEEYIILIFQNLDPANMVFESII
 NEIGIKNNISNFFAKIPFEEANGRLVACTRTYEESIKGSCGQKENIKTVSFEKIQLRKQEFQFFDEE
 EETGENHTIFIGPVEKLIYPPPPAKGGISVTNEDLHCLNEGEFLNDVIDFYLYLVLEKLLKEDADRI
 HIFSSFFYKRLNQRERRNHETTNSIQQRHGRVKTWTRHVDIFEKDFIFVPLNEAAHWFLAVVCFPGLE
 KPKEYEPNPHYHENAVIQKCSTVEDSCISSASEMESCSQNSAKPVIKMLNKKHCIAVIDSNPGQEESD
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 ESPEAGKMLEDELVDFSEDQDNQDSSDDGFLADDNCSSEIGQWHLKPTICKQPCILLMDSLGRPSRSNV
 YKILREYLEVEWEVKKGSKRSFKDVMKGSNPKVPQQNNFSDCGVYVLYVESFFENPILSFELPMLAN
 WFPPPRMRTKREEIRNIILKLQEDQSKEKRKHKDTYSTEAPLGEGTEQYVNSISD

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001100409

ORF Size: 3315 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_001100409.3](#)

RefSeq Size: 6624 bp

RefSeq ORF: 3318 bp

Locus ID: 26054

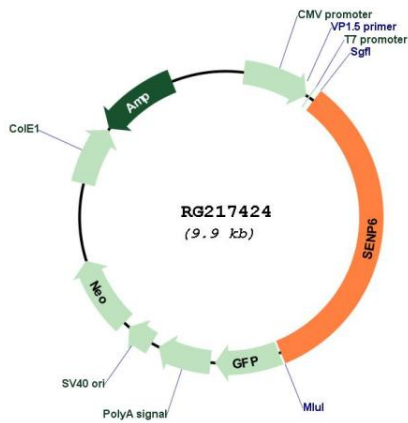
UniProt ID: [Q9GZR1](#)

Cytogenetics: 6q14.1

Protein Families: Druggable Genome, Protease

Gene Summary: 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]

Product images:



Circular map for RG217424