

Product datasheet for RC236528

Securin (PTTG1) (NM_001282383) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Securin (PTTG1) (NM_001282383) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: Securin
Synonyms: EAP1; HPTTG; PTTG; TUTR1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC236528 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCTACTCTGATCTATGTTGATAAGGAAAATGGAGAACCAGGCACCCGTGTGGTTGCTAAGGATGGGC
 TGAAGCTGGGTCTGGACCTTCAATCAAAGCCTTAGATGGGAGATCTCAAGTTTCAACACCACGTTTTGG
 CAAAACGTTTCGATGCCCCACCAGCCTTACCTAAAGCTACTAGAAAGGCTTTGGGAACTGTCAACAGAGCT
 ACAGAAAAGTCTGTAAGACCAAGGGACCCTCAAACAAAAACAGCCAAGCTTTTCTGCCAAAAAGATGA
 CTGAGAAGACTGTTAAAGCAAAAAGCTCTGTTCTGCCTCAGATGATGCCTATCCAGAAATAGAAAAATT
 CTTTCCCTTCAATCCTCTAGACTTTGAGAGTTTGGACCTGCCTGAAGAGCACCAGATTGCGCACCTCCCC
 TTGAGTGGAGTGCCTCTCATGATCCTTGACGAGGAGAGAGAGCTTAAAAAGCTGTTTCAGCTGGGCCCCC
 CTTACCTGTGAAGATGCCCTCTCCACCATGGGAATCCAATCTGTTGCAGTCTCCTTCAAGCATTCTGTC
 GACCCTGGATGTTGAATTGCCACCTGTTTGCTGTGACATAGATATT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC236528 protein sequence
 Red=Cloning site Green=Tags(s)

MATLIYVDKENGEPGTRVVAKDGLKLGSGPSIKALDGRSQVSTPRFGKTFDAPPALPKATRKALGTVNRA
 TEKSVKTKGPLKQKQPSFSAKKMTEKTVKAKSSVPASDDAYPEIEKFFPNPLDFESFDLPEEHQIAHLP
 LSGVPLMILDEERELEKLFQLGPPSPVKMPSPPWESNLLQSPSSILSTLDVELPPVCCDIDI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



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Chromatograms: https://cdn.origene.com/chromatograms/mk6234_b01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001282383

ORF Size: 606 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_001282383.1](#), [NP_001269312.1](#)

RefSeq Size: 947 bp

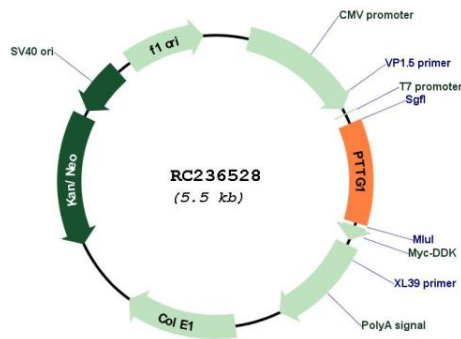
RefSeq ORF: 609 bp

Locus ID: 9232

UniProt ID: [O95997](#)
Cytogenetics: 5q33.3
Protein Families: Druggable Genome, Transcription Factors
Protein Pathways: Cell cycle, Oocyte meiosis
MW: 22 kDa

Gene Summary: The encoded protein is a homolog of yeast securin proteins, which prevent separins from promoting sister chromatid separation. It is an anaphase-promoting complex (APC) substrate that associates with a separin until activation of the APC. The gene product has transforming activity in vitro and tumorigenic activity in vivo, and the gene is highly expressed in various tumors. The gene product contains 2 PXXP motifs, which are required for its transforming and tumorigenic activities, as well as for its stimulation of basic fibroblast growth factor expression. It also contains a destruction box (D box) that is required for its degradation by the APC. The acidic C-terminal region of the encoded protein can act as a transactivation domain. The gene product is mainly a cytosolic protein, although it partially localizes in the nucleus. Three transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Sep 2013]

Product images:



Circular map for RC236528