

## Product datasheet for RC236527

### Securin (PTTG1) (NM\_001282382) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Securin (PTTG1) (NM\_001282382) 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:** >RC236527 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGGATCGCC

ATGGCTACTCTGATCTATGTTGATAAGGAAAATGGAGAACCAGGCACCCGTGTGGTTGCTAAGGATGGGC  
 TGAAGCTGGGTCTGGACCTTCAATCAAAGCCTTAGATGGGAGATCTCAAGTTTCAACACCACGTTTTGG  
 CAAAACGTTTCGATGCCCCACCAGCCTTACCTAAAGCTACTAGAAAGGCTTTGGGAACTGTCAACAGAGCT  
 ACAGAAAAGTCTGTAAGACCAAGGGACCCTCAAACAAAAACAGCCAAGCTTTTCTGCCAAAAAGATGA  
 CTGAGAAGACTGTTAAAGCAAAAAGCTCTGTTCTGCCTCAGATGATGCCTATCCAGAAATAGAAAATT  
 CTTTCCCTTCAATCCTCTAGACTTTGAGAGTTTGGACCTGCCTGAAGAGCACCAGATTGCGCACCTCCCC  
 TTGAGTGGAGTGCCTCTCATGATCCTTGACGAGGAGAGAGAGCTTAAAAAGCTGTTTCAGCTGGGCCCCC  
 CTTACCTGTGAAGATGCCCTCTCCACCATGGGAATCCAATCTGTTGCAGTCTCCTTCAAGCATTCTGTC  
 GACCCTGGATGTTGAATTGCCACCTGTTTGCTGTGACATAGATATT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC236527 protein sequence  
 Red=Cloning site Green=Tags(s)

MATLIYVDKENGEPGTRVVAKDGLKLGSGPSIKALDGRSQVSTPRFGKTFDAPPALPKATRKALGTVNRA  
 TEKSVKTKGPKQKQPSFSAKKMTEKTVKAKSSVPASDDAYPEIEKFFPNPLDFESFDLPEEHQIAHLP  
 LSGVPLMILDEERELEKLFQLGPPSPVKMPSPPWESNLLQSPSSILSTLDVELPPVCCDIDI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6234\\_b01.zip](https://cdn.origene.com/chromatograms/mk6234_b01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001282382

**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\\_001282382.1](#), [NP\\_001269311.1](#)

**RefSeq Size:** 1093 bp

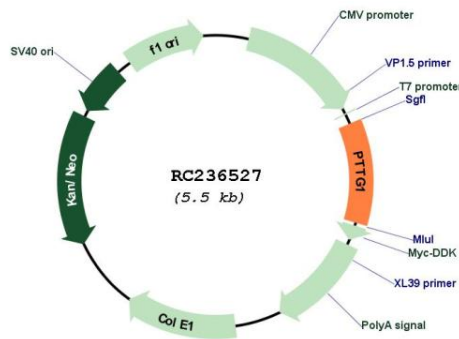
**RefSeq ORF:** 609 bp

**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 RC236527