

Product datasheet for **RG236528**

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: TurboGFP
Symbol: Securin
Synonyms: EAP1; HPTTG; PTTG; TUTR1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG236528 representing NM_001282383.
Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCTACTCTGATCTATGTTGATAAGGAAATGGAGAACCAGGCACCCGTGTGTTGCTAAGGATGGG
CTGAAGCTGGGGTCTGGACCTTCAATCAAAGCCTTAGATGGGAGATCTCAAGTTTCAACACCACGTTTT
GGCAAACGTTTCGATGCCACCAGCCTTACCTAAAGCTACTAGAAAGCCTTTGGAACTGTCAACAGA
GCTACAGAAAAGTCTGTAAGACCAAGGGACCCCTCAAACAAAAACAGCCAAGCTTTTCTGCCAAAAAG
ATGACTGAGAAGACTGTTAAAGCAAAAAGCTCTGTTCTGCCTCAGATGATGCCTATCCAGAAATAGAA
AAATTCTTCCCTCAATCCTCTAGACTTTGAGAGTTTTGACCTGCCTGAAGAGCACCAGATTGCGCAC
CTCCCCTTGAGTGGAGTGCCTCTCATGATCCTTGACGAGGAGAGAGAGCTTGAAAAGCTGTTTCAGCTG
GGCCCCCTTACCTGTGAAGATGCCCTCTCCACCATGGGAATCCAATCTGTTGCAGTCTCCTTCAAG
ATTCTGTGACCTGGATGTTGAATTGCCACCTGTTTGCTGTGACATAGATATT
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

Protein Sequence: >Peptide sequence encoded by RG236528
Blue=ORF Red=Cloning site Green=Tag(s)

```
MATLIYVDKENGEPGTRVVAKDGLKLGSGPSIKALDGRSQVSTPRFGKTFDAPPALPKATRKALGTVNR
ATEKSVTKGPKLQKQPSFSAKMKTEKTVKAKSSVPASDDAYPEIEKFFPFNPLDFESFDLPEEHQIAH
LPLSGVPLMILDEERELEKLFQLGPPSPVKMPSPPWESNLLQSPSSILSTLDVELPPVCCDIDI
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPYSGYENPFLHAINNGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFSAIHP SILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERY
```

Restriction Sites: Sgfl-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).

RefSeq: [NM_001282383.1](#), [NP_001269312.1](#)

RefSeq Size: 947 bp

RefSeq ORF: 609 bp

Locus ID: 9232

UniProt ID: [O95997](#)

Cytogenetics: 5q33.3

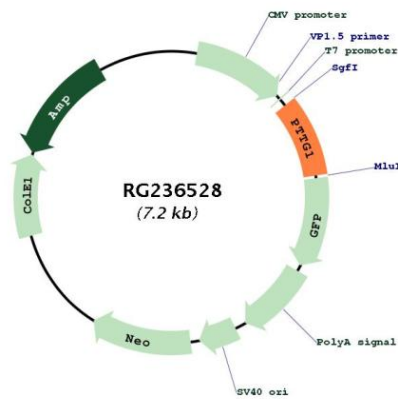
Protein Families: Druggable Genome, Transcription Factors

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 RG236528