

Product datasheet for **RG211038**

Securin (PTTG1) (NM_004219) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Securin (PTTG1) (NM_004219) 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: >RG211038 representing NM_004219
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCTACTCTGATCTATGTTGATAAGGAAAATGGAGAACCAGGCACCCGTGTGGTTGCTAAGGATGGGC
 TGAAGCTGGGTCTGGACCTTCAATCAAAGCCTTAGATGGGAGATCTCAAGTTTCAACACCACGTTTTGG
 CAAAACGTTTCGATGCCCCACCAGCCTTACCTAAAGCTACTAGAAAGGCTTTGGGAACTGTCAACAGAGCT
 ACAGAAAAGTCTGTAAGACCAAGGGACCCTCAAACAAAACAGCCAAGCTTTTCTGCCAAAAGATGA
 CTGAGAAGACTGTAAAGCAAAAAGCTCTGTTCTGCCTCAGATGATGCCTATCCAGAAATAGAAAATT
 CTTCCCTTCAATCCTCTAGACTTTGAGAGTTTGACCTGCCTGAAGAGCACCAGATTGCGCACCTCCCC
 TTGAGTGGAGTGCCTCTCATGATCCTTGACGAGGAGAGAGCTTGAAAAGCTGTTTCAGCTGGGCCCCC
 CTTACCTGTGAAGATGCCCTCTCCACCATGGGAATCCAATCTGTTGCAGTCTCCTTCAAGCATTCTGTC
 GACCCTGGATGTTGAATTGCCACCTGTTTGCTGTGACATAGATATT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG211038 representing NM_004219
 Red=Cloning site Green=Tags(s)

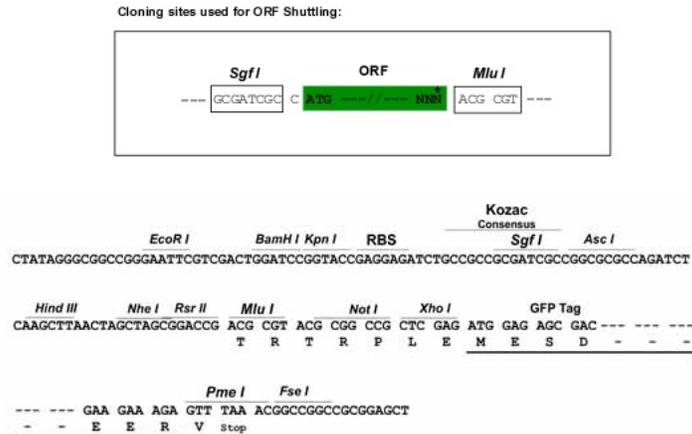
MATLIYVDKENGEPGTRVVAKDGLKLGSGPSIKALDGRSQVSTPRFGKTFDAPPALPKATRKALGTVNRA
 TEKSVKTKGPLKQKQPSFSAKMTEKTVKAKSSVPASDDAYPEIEKFFPNPLDFESFDLPEEHQIAHLP
 LSGVPLMILDEERELEKLFQLGPPSPVKMPSPPWESNLLQSPSSILSTLDVELPPVCCDIDI

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



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Cloning Scheme:


ACCN: NM_004219

ORF Size: 606 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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:

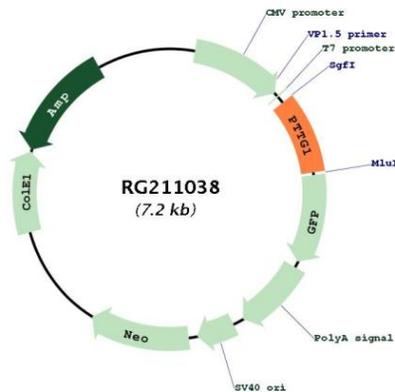
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store 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_004219.4](#)

RefSeq Size: 728 bp
RefSeq ORF: 609 bp
Locus ID: 9232
UniProt ID: [Q95997](#)
Cytogenetics: 5q33.3
Domains: Securin
Protein Families: Druggable Genome, Transcription Factors
Protein Pathways: Cell cycle, Oocyte meiosis
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 RG211038