

Product datasheet for **RG232141**

SKP2 (NM_001243120) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: SKP2 (NM_001243120) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: SKP2
Synonyms: FBL1; FBXL1; FLB1; p45
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG232141 representing NM_001243120
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGACCAACCATTGGCTGAACATTTTCAGTACTCTCGAAAAAACAATTTAGTGGACTTAACCTTT
CTGGGTGTTCTGGATTCTCTGAATTTGCCCTGCAGACTTTGCTAAGCAGCTGTTCCAGACTGGATGAGCT
GAACCTCTCTGGTGTGTTTGTTCAGTAAAAGCATGTACAGGTGGCTGTTGCCATGTGTCAGAGACC
ATCACCCAGCTGAATCTTAGCGGCTACAGAAAGAATCTCCAGAAATCAGATCTCTACTTTAGTTAGAA
GATGCCCAATCTGTCCATCTAGACTTAAGTGATAGTGTATGCTAAAGAATGACTGCTTTCAGGAATT
TTTCCAGCTCAACTACCTCCAACACCTATCACTCAGTCGGTGCTATGATATAATACCTGAACTTTACTT
GAACTTGGAGAAATTTCCACACTAAAAACACTACAAGTTTTTGGAAATCGTGCCAGATGGTACCCTTCAAC
TGTTAAAGGAAGCCCTTCTCATCTACAGATTAATTGCTCCCATTTACCACCATTGCCAGGCCAATAT
TGGCAACAAAAAGAACCAGGAGATATGGGGCATCAATGCCGACTGACACTGCAAAAGCCAGTTGTCTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG232141 representing NM_001243120
Red=Cloning site Green=Tags(s)

MDQPLAEHFSTLAKNSNLVRLNLSGCSGFSEFALQTLSSCSRLDELNLSWCFDFTEKHVQVAVAHVSET
ITQLNLSGYRKNLQKSDLSTLVRRCPNLVHLDLSDSVMLKNDQCFQEFFQLNQLHLSLRCYDIIPETLL
ELGEIPTLKTQVFGIVPDGTLQLLKEALPHLQINCSHFTTIARPTIGNKKNQEIWGIKRLTLQKPSCL

TRTRPLE - GFP Tag - V

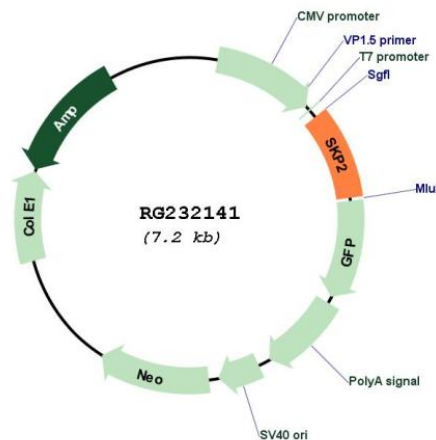
Restriction Sites: SgfI-MluI



Cloning Scheme:



Plasmid Map:



ACCN: NM_001243120

ORF Size: 630 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_001243120.1](#), [NP_001230049.1](#)

RefSeq Size: 3273 bp

RefSeq ORF: 633 bp

Locus ID: 6502

UniProt ID: [Q13309](#)

Cytogenetics: 5p13.2

Protein Families: Druggable Genome

Protein Pathways: Acute myeloid leukemia, Apoptosis, Cell cycle, Oocyte meiosis, p53 signaling pathway, Pathways in cancer, Progesterone-mediated oocyte maturation, Small cell lung cancer, Ubiquitin mediated proteolysis

Gene Summary: This gene encodes a member of the F-box protein family which is characterized by an approximately 40 amino acid motif, the F-box. The F-box proteins constitute one of the four subunits of ubiquitin protein ligase complex called SCFs (SKP1-cullin-F-box), which function in phosphorylation-dependent ubiquitination. The F-box proteins are divided into 3 classes: Fbws containing WD-40 domains, Fbls containing leucine-rich repeats, and Fbxs containing either different protein-protein interaction modules or no recognizable motifs. The protein encoded by this gene belongs to the Fbls class; in addition to an F-box, this protein contains 10 tandem leucine-rich repeats. This protein is an essential element of the cyclin A-CDK2 S-phase kinase. It specifically recognizes phosphorylated cyclin-dependent kinase inhibitor 1B (CDKN1B, also referred to as p27 or KIP1) predominantly in S phase and interacts with S-phase kinase-associated protein 1 (SKP1 or p19). In addition, this gene is established as a protooncogene causally involved in the pathogenesis of lymphomas. Alternative splicing of this gene generates three transcript variants encoding different isoforms. [provided by RefSeq, Jul 2011]