

Product datasheet for **RC214001**

SKP2 (NM_005983) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SKP2 (NM_005983) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SKP2
Synonyms:	FBL1; FBXL1; FLB1; p45
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC214001 representing NM_005983
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCACAGGAAGCACCTCCAGGAGATCCAGACCTGAGTAGCAACGTTGCCACCAGCTTCACGTGGGGAT
 GGGATTCCAGCAAGACTTCTGAACTGCTGTAGGCATGGGGTCTCCGCCCTGGAGAAAGAGGAGCCCGA
 CAGTGAGAACATCCCCAGGAAGTCTCTCAAACCTGGGCCACCCGAGAGCCCCACGAAACGGCTG
 AAGAGCAAAGGGAGTGACAAAGACTTTGTGATTGTCGCGAGCCTAAGCTAAATCGAGAGAACTTTCCAG
 GTGTTTACAGGACTCCCTCCGGATGAGCTGCTTTGGGAATCTTTTCTGTCTGTGCCTCCCTGAGCT
 GCTAAAGTCTCTGGTGTGTTGTAAGAGGTGGTATCGCCTAGCGTCTGATGAGTCTCTATGGCAGACCTTA
 GACCTCACAGGTAATACTGCACCCGGATGTGACTGGTCGGTGTCTCAAGGGGTGATTGCCTTCC
 GCTGCCACGATCATTTATGGACCAACCATTGGCTGAACATTTCCAGCCCTTTTCGTGACAGCACATGGA
 CCTATCGAACTCAGTTATAGAAGTGTCCACCCTCCACGCATACTGTCTCAGTGTCCAAGTTGCAGAAT
 CTAAGCCTGGAAGGCCTCGCGCTTCGGATCCCATTTGCAATACTCTCGCAAAAACTCAAATTTAGTGC
 GACTTAACCTTTCTGGTGTCTGGATTCTCTGAATTTGCCCTGCAGACTTTGCTAAGCAGCTGTTCCAG
 ACTGGATGAGCTGAACCTCTCCTGGTGTGTTGATTTCACTGAAAAGCATGTACAGGTGGCTGTTGCGCAT
 GTGTCAGAGACCATACCCAGCTGAATCTTAGCGGCTACAGAAAGAAATCTCCAGAAATCAGATCTCTCTA
 CTTTAGTTAGAAGATGCCCAATCTTGTCCATCTAGACTTAAGTGATAGTGTGATGCTAAAGAATGACTG
 CTTTCAGGAATTTTCCAGCTCACTACCTCCAACACCTATCACTCAGTCGGTGCATGATATAAATACCT
 GAAACTTTACTTGAAGTAAAGGAAGCCCTTCCTCATCTACAGATTAATTGCTCCCATTTACCACCATTGC
 GTACCCCTCAACTGTTAAAGGAAGCCCTTCCTCATCTACAGATTAATTGCTCCCATTTACCACCATTGC
 CAGGCCAACTATTGGCAACAAAAGAACCAGGAGATATGGGGCATCAAATGCCGACTGACACTGCAAAAG
 CCCAGTTGTCTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC214001 representing NM_005983
 Red=Cloning site Green=Tags(s)

MHRKHLQEIPDLSSNVATSFTWGWDSKTSSELLSGMGVSALEKEEPPDENIPQELLSNLGHPESPFRKRL
 KSKGSDKDFVIVRRPKLNRENFPVSWDSLPEDELLGIFSCCLPELLKVSGVCKRWYRLASDESLWQTL
 DLTGKLNHPDVTGRLLSQGVIAFRCPFSFMDQPLAEHFSFRVQHMDLSNSVIEVSTLHGILSQCSKLQN
 LSLEGLRLSDPIVNTLAKNSNLVRLNLSGCSGFSEFALQTLSSCSRLDELNLSWCFDFTEKHVQVAVAH
 VSETITQLNLSGYRKNLQKSDLSTLVRRCPNLVHLDLSDSVMLKNDCFQEFFQLNYLQHLSLSRCYDIIP
 ETLLELGEIPTLKTQVFGIVPDGTLQLLKEALPHLQINCSHFTTIARPTIGNKKNQEIWGIKRLTLQK
 PSCL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg2451_d02.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_005983

ORF Size: 1272 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_005983.4](#)

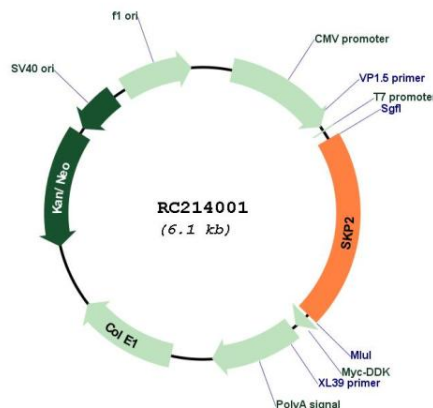
RefSeq Size: 1600 bp

RefSeq ORF: 1275 bp

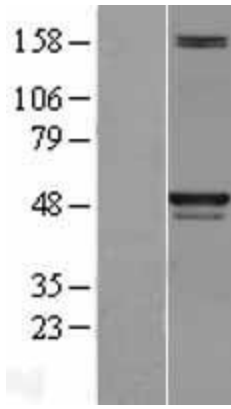
Locus ID: 6502

UniProt ID:	<u>Q13309</u>
Cytogenetics:	5p13.2
Domains:	LRR, F-box, LRR_CC
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
MW:	47.6 kDa
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]

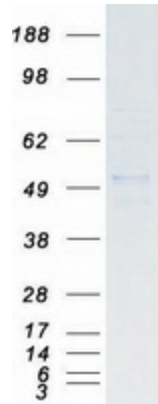
Product images:



Circular map for RC214001



Western blot validation of overexpression lysate (Cat# [LY401815]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214001 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SKP2 protein (Cat# [TP314001]). The protein was produced from HEK293T cells transfected with SKP2 cDNA clone (Cat# RC214001) using MegaTran 2.0 (Cat# [TT210002]).