

Product datasheet for **RR206545**

Skp1 (NM_001007608) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Skp1 (NM_001007608) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Skp1
Synonyms: Skp1a
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RR206545 representing NM_001007608
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCTACGATAAAGTTGCAGAGTTCTGATGGAGAGATATTTGAAGTTGATGTAGAAATTGCCAAACAAT
CTGTGACCATTAAGACCATGCTGGAAGATTTGGGAATGGATGATGAGGGAGATGATGATCCTGTTCTTT
ACCAAATGTTAATGCAGCAATTCTAAAAAGGTCATTCAGTGGTGCACCCACCACAAGGATGACCCTCT
CCTCCTGAGGATGATGAGAACAAAGAGAAGCGGACAGATGATATTCCTGTTGGGACCAAGAATTCCTGA
AAGTTGACCAAGGAACACTTTTTGAACCTATTCTGGCTGCAAACTACTTAGACATCAAAGGTTTGCCTGA
TGTACCTGCAAGACTGTGGCTAATATGATTAAGGGGAAAACGCCTGAGGAGATTCGTAACCTTCAAT
ATCAAAAATGACTTTACTGAAGAGGAGGAGGCCCGGTACGCAAAGAGAACCAGTGGTGTGAAGAGAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR206545 representing NM_001007608
Red=Cloning site Green=Tags(s)

MPTIKLQSSDGEIFEVDVEIAKQSVTIKTMLEDLGMDDGDDDPVPLPNVNAAILKKVIQWCTHHKDDPP
PPEDDENKEKRTDDIPVWDQEFKVDQGTFLFELILAANYLDIKGLLDVTCKTVANMIKGTPEEIRKTFN
IKNDFTEEEEAQVRKENQWCEEK

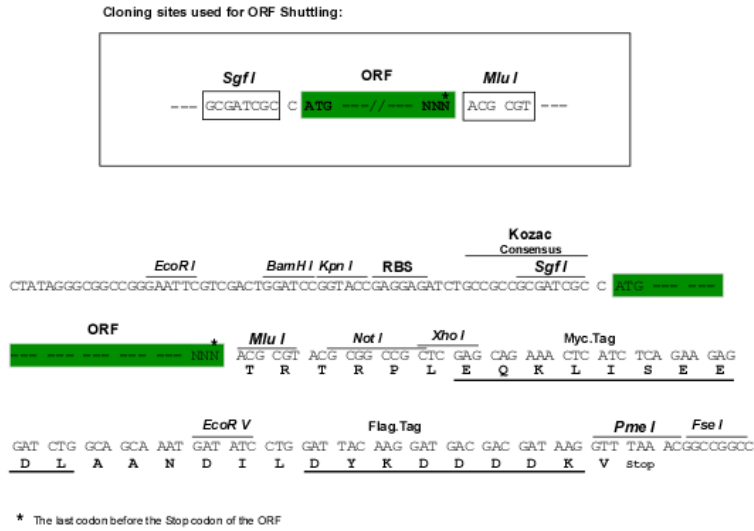
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

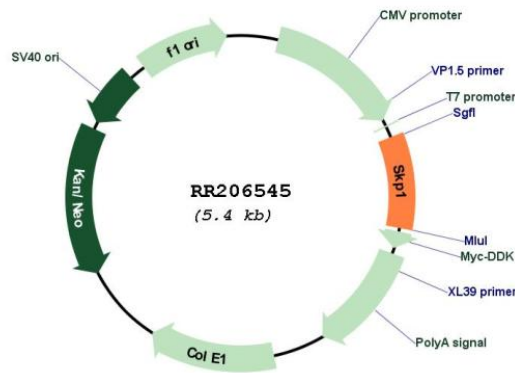


[View online »](#)

Cloning Scheme:



Plasmid Map:



ACCN: NM_001007608

ORF Size: 489 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_001007608.2](#), [NP_001007609.1](#)

RefSeq Size: 1244 bp

RefSeq ORF: 492 bp

Locus ID: 287280

UniProt ID: [Q6PEC4](#)

Cytogenetics: 10q22

MW: 18.7 kDa

Gene Summary:

Essential component of the SCF (SKP1-CUL1-F-box protein) ubiquitin ligase complex, which mediates the ubiquitination of proteins involved in cell cycle progression, signal transduction and transcription. In the SCF complex, serves as an adapter that links the F-box protein to CUL1. The functional specificity of the SCF complex depends on the F-box protein as substrate recognition component. SCF(BTRC) and SCF(FBXW11) direct ubiquitination of CTNNB1 and participate in Wnt signaling. SCF(FBXW11) directs ubiquitination of phosphorylated NFKBIA. SCF(BTRC) directs ubiquitination of NFKBIB, NFKBIE, ATF4, SMAD3, SMAD4, CDC25A, FBXO5, CEP68 and probably NFKB2. SCF(SKP2) directs ubiquitination of phosphorylated CDKN1B/p27kip and is involved in regulation of G1/S transition. SCF(SKP2) directs ubiquitination of ORC1, CDT1, RBL2, ELF4, CDKN1A, RAG2, FOXO1A, and probably MYC and TAL1. SCF(FBXW7) directs ubiquitination of cyclin E, NOTCH1 released notch intracellular domain (NICD), and probably PSEN1. SCF(FBXW2) directs ubiquitination of GCM1. SCF(FBXO32) directs ubiquitination of MYOD1. SCF(FBXO7) directs ubiquitination of BIRC2 and DLGAP5. SCF(FBXO33) directs ubiquitination of YBX1. SCF(FBXO11) directs ubiquitination of BCL6 and DTL but does not seem to direct ubiquitination of TP53. SCF(BTRC) mediates the ubiquitination of NFKBIA at 'Lys-21' and 'Lys-22'; the degradation frees the associated NFKB1-RELA dimer to translocate into the nucleus and to activate transcription. SCF(CCNF) directs ubiquitination of CCP110. SCF(FBXL3) and SCF(FBXL21) direct ubiquitination of CRY1 and CRY2. SCF(FBXO9) directs ubiquitination of TTI1 and TELO2. SCF(FBXO10) direct ubiquitination of BCL2.[UniProtKB/Swiss-Prot Function]