

## Product datasheet for **RC221147**

### Parkin (PARK2) (NM\_004562) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Parkin (PARK2) (NM_004562) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Parkin
Synonyms:	AR-JP; LPRS2; PARK2; PDJ
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC221147 representing NM\_004562  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGATAGTGTGGTTCAGGTTCAACTCCAGCCATGGTTCCAGTGGAGGTCGATTCTGACACCAGCATCT  
 TCCAGCTCAAGGAGGTGGTTGCTAAGCGACAGGGGTTCCGGCTGACCAGTTGCGTGTGATTTTCGAGG  
 GAAGGAGCTGAGGAATGACTGGACTGTGACAGAATTGTGACCTGGATCAGCAGAGCATTGTTACATTGTG  
 CAGAGACCGTGGAGAAAAGGTCAAGAAATGAATGCAACTGGAGGCGACGACCCAGAAAACCGCGGGAG  
 GCTGTGAGCGGGAGCCCCAGAGCTTGACTCGGGTGGACCTCAGCAGCTCAGTCTCCAGGAGACTCTGT  
 GGGGCTGGCTGTCATTCTGCACACTGACAGCAGGAAGGACTCACACCAGCTGGAAGTCCAGCAGGTAGA  
 TCAATCTACAACAGCTTTTATGTGATTGTAAGGCCCTGTCAAAGAGTGCAGCCGGGAAACTCAGGG  
 TACAGTGCAGCACCTGCAGGCAGGCAACGCTCACCTTGACCCAGGGTCCATCTTGCTGGGATGATGTTTT  
 AATTCCAAACCGGATGAGTGGTGAATGCCAATCCCACACTGCCCTGGGACTAGTGCAGAATTTTCTTT  
 AAATGTGGAGCACACCCACCTCTGACAAGGAAACATCAGTAGCTTTGCACCTGATCGCAACAAATAGTC  
 GGAACATCACTTGCATTACGTGCACAGACGTGAGGAGCCCGTCCCTGGTTTTCCAGTGCAACTCCCGCCA  
 CGTGATTTGCTTAGACTGTTTCCACTTATACTGTGTGACAAGACTCAATGATCGGCAGTTTGTTCACGAC  
 CCTCAACTTGGCTACTCCCTGCCTTGTGTGGCTGGCTGTCCCAACTCCTTGATTAAGAGCTCCATCACT  
 TCAGGATTCTGGGAGAAGAGCAGTACAACCGGTACCAGCAGTATGGTGCAGAGGAGTGTGCTCCTGCAGAT  
 GGGGGCGTGTTATGCCCCGCCCTGGCTGTGGAGCGGGCTGCTGCCGGAGCCTGACCAGAGGAAAAGTC  
 ACCTGCGAAGGGGCAATGGCCTGGGCTGTGGGTTTGCCTTCTGCCGGGAATGTAAGAAGCGTACCATG  
 AAGGGAGTGCAGTGCCGTATTTGAAGCCTCAGGAACAACACTCAGGCCACAGAGTGCATGAAAGAGC  
 CGCCGAGCAGGCTCGTTGGGAAGCAGCCTCCAAGAAACCATCAAGAAAACCAAGCCCTGTCCCGC  
 TGCCATGTACCAGTGAAAAAATGGAGGCTGCATGCACATGAAGTGTCCGCAGCCCAAGTGCAGGCTCG  
 AGTGGTGTGGAAGTGTGGCTGCGAGTGAACCGCTCTGCATGGGGACCACACTGGTTTCAGCGTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC221147 representing NM\_004562  
 Red=Cloning site Green=Tags(s)

MIVFVRFNSSHGFPVEVSDTSIFQLKEVVAKRQGV PADQLRVIFAGKELRNDWTVQNCDLDDQSIIVHIV  
 QRPWRKGQEMNATGGDDPRNAAGGCEREPQSLTRVDLSSVLPGDVSVGLAVILHTDSRKDSPPAGSPAGR  
 SIYNSFYVYCKGPCQRVQPGKLRVQCSTCRQATLTLTQGPSCWDDVLIIPNRMSGECQSPHCPGTSAEFFF  
 KCGAHPSTDKETSVALHLIATNSRNITCITCTDVRSPVLFQCNSRHVICLDCFHLYCVTRLNDRQFVHD  
 PQLGYSLPCVAGCPNSLIKELHHFRILGEEQYNRYQQYGAEECVLQMGVLCPRPGCGALLPEPDQRKV  
 TCEGGNGLGCGFAFCRECKEAYHEGECSAVFEASGTTTQAYRVDERAAEQARWEAASKETIKKTTKPCPR  
 CHVPVEKNGGCMHMKCPQPQCRLEWCWNCGEWNRVCMGDHWFVDV

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mg4174\\_c01.zip](https://cdn.origene.com/chromatograms/mg4174_c01.zip)

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_004562

**ORF Size:** 1395 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\\_004562.3](#)

**RefSeq Size:** 2960 bp

**RefSeq ORF:** 1398 bp

**Locus ID:** 5071

**UniProt ID:** [O60260](#)

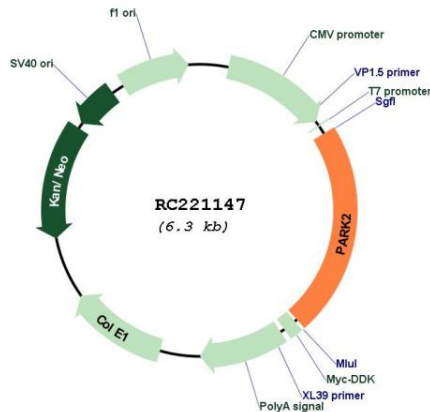
**Cytogenetics:** 6q26

**Protein Pathways:** Parkinson's disease, Ubiquitin mediated proteolysis

**MW:** 51.5 kDa

**Gene Summary:** The precise function of this gene is unknown; however, the encoded protein is a component of a multiprotein E3 ubiquitin ligase complex that mediates the targeting of substrate proteins for proteasomal degradation. Mutations in this gene are known to cause Parkinson disease and autosomal recessive juvenile Parkinson disease. Alternative splicing of this gene produces multiple transcript variants encoding distinct isoforms. Additional splice variants of this gene have been described but currently lack transcript support. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RC221147