

E3 ubiquitin-protein ligase parkin (PRKN) Recombinant Protein | PRKN recombinant protein

Recombinant Human E3 ubiquitin-protein ligase parkin (PRKN)

CATALOG # AAA18594	HOST E Coli or Yeast or Baculovirus or Mammalian Cell
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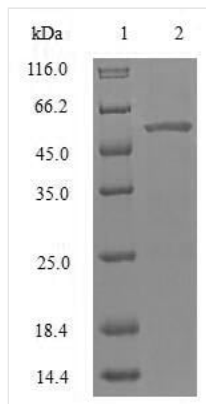
PRODUCT SYNONYMS

E3 ubiquitin-protein ligase parkin (PRKN); Recombinant Human E3 ubiquitin-protein ligase parkin (PRKN); Parkinson juvenile disease protein 2; Parkinson disease protein 2; PRKN recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Sequence Positions	1-465aa; Full Length
Sequence	MIVFVRFNSS HGFPVEVDSD TSIFQLKEVV AKRQGV PADQ LRVIFAGKEL RNDWTVQNCD LDQQSIVHIV QRPWRKGQEM NATGGDDPRN AAGGCEREPQ SLTRVDLSSS VLPGDSVGLA VILHTDSRKD SPPAGSPAGR SIYNSFYVYC KGPCQRVQPG KLRVQCSTCR QATLTLTQGP SCWDDVLIPN RMSGECQSPH CPGTSAEFFF KCGAHPTSDK ETSVALHLIA TNSRNITCIT CTDVRSPLV FQCNSRHVIC LDCFHLYCVT RLNDRQFVHD PQLGYSLPCV AGCPNSLIKE LHHFRILGEE QYNRYQQYGA EECVLQMGGV LCPRPGCGAG LLPEPDQRKV TCEGGNGLGC GFAFCRECKE AYHEGECSAV FEASGTTTQA YRVDERAAEQ ARWEAASKET IKKTTKPCPR CHVPVEKNGG CMHMKCPQPQ CRLEWCWNCG CEWNRVCMGD HWFDV
Preparation and Storage	Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for PRKN recombinant protein	Functions within a multiprotein E3 ubiquitin ligase complex, catalyzing the covalent attachment of ubiquitin moieties onto substrate proteins, such as BCL2, SYT11, CCNE1, GPR37, RHOT1/MIRO1, MFN1, MFN2, STUB1, SNCAIP, SEPT5, TOMM20, USP30, ZNF746 and AIMP2. Mediates monoubiquitination as well as 'Lys-6', 'Lys-11', 'Lys-48'-linked and 'Lys-63'-linked polyubiquitination of substrates depending on the context. Participates in the roval and/or detoxification of abnormally folded or damaged protein by mediating 'Lys-63'-linked polyubiquitination of misfolded proteins such as PARK7: 'Lys-63'-linked polyubiquitinated misfolded proteins are then recognized by HDAC6, leading to their recruitment to aggresomes, followed by degradation. Mediates 'Lys-63'-linked polyubiquitination of a 22 kDa O-linked glycosylated isoform of SNCAIP, possibly playing a role in Lewy-body formation. Mediates monoubiquitination of BCL2, thereby acting as a positive regulator of autophagy. Promotes the autophagic degradation of dysfunctional depolarized mitochondria (mitophagy) by promoting the ubiquitination of mitochondrial proteins such as TOMM20, RHOT1/MIRO1 and USP30. Preferentially assbles 'Lys-6'-, 'Lys-11'- and 'Lys-63'-linked polyubiquitin chains following mitochondrial damage, leading to mitophagy. Mediates 'Lys-48'-linked polyubiquitination of ZNF746, followed by degradation of ZNF746 by the proteasome; possibly playing a role in the regulation of neuron death. Limits the production of reactive oxygen species (ROS). Regulates cyclin-E during neuronal apoptosis. In collaboration with CHPF isoform 2, may enhance cell viability and protect cells from oxidative stress. Independently of its ubiquitin ligase activity, protects from apoptosis by the transcriptional repression of p53/TP53. May protect neurons against alpha synuclein toxicity, proteasomal dysfunction, GPR37 accumulation, and kainate-induced excitotoxicity. May play a role in controlling neurotransmitter trafficking at the presynaptic terminal and in calcium-dependent exocytosis. May represent a tumor suppressor gene
Product Categories/Family for PRKN recombinant protein	Apoptosis

References

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NCBI AND UNIPROT INFORMATION

NCBI GI #	169790969
NCBI GeneID	5071
NCBI Accession #	NP_004553.2
NCBI GenBank Nucleotide #	NM_004562.2
UniProt Accession #	O60260; Q5TFV8; Q5VVX4; Q6Q2I6; Q8NI41; Q8NI43; Q8NI44; Q8WW07; A3FG77; A8K975; D3JZW7; D3K2X0
Molecular Weight	55.6 kDa
NCBI Official Full Name	E3 ubiquitin-protein ligase parkin isoform 1
NCBI Official Synonym Full Names	parkin RBR E3 ubiquitin protein ligase
NCBI Official Symbol	PARK2
NCBI Official Synonym Symbols	PDJ; PRKN; AR-JP; LPRS2

NCBI Protein Information	E3 ubiquitin-protein ligase parkin
UniProt Protein Name	E3 ubiquitin-protein ligase parkin
UniProt Gene Name	PARK2
UniProt Synonym Gene Names	PRKN; Parkin; Parkinson disease protein 2
UniProt Entry Name	PRKN2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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