



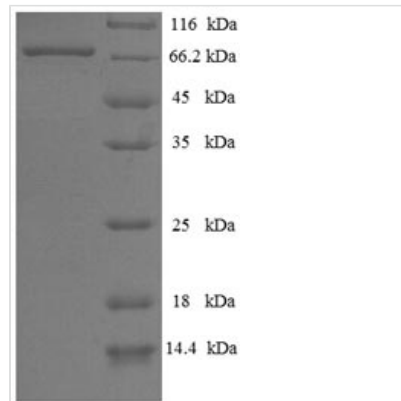
Recombinant Human E3 ubiquitin-protein ligase parkin(PRKN)

Product Code	CSB-EP017451HU
Relevance	<p>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</p>
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	O60260
Storage Buffer	Tris-based buffer,50% glycerol
Alias	Parkinson juvenile disease protein 2 ;Parkinson disease protein 2
Product Type	Recombinant Protein
Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MIVFVRFNSSHGFPVEVDS DTSIFQLKEVVAKRQGV PADQLRVIFAGKELRND



WTVQNCDLDDQQSIVHIVQRPWRKQGEMNATGGDDPRNAAGGCEREPQSLT
 RVDLSSSVLPGDSVGLAVILHTDSRKDSPAGSPAGRSIYNSFYVYCKGPCQR
 VQPGKLRVQCSTCRQATLTLTQGPSCWDDVLIPNRMSGECQSPHCPGTSAE
 FFFKCGAHPTSDKETSVALHLIATNSRNITCITCTDVRSPVLVFCNSRHVICLD
 CFHLYCVTRLNDRQFVHDPQLGYSLPCVAGCPNSLIKELHHFRILGEEQYNRY
 QQYGAEECVLQMGGVLCPRPGCGAGLLPEPDQRKVTCEGGNGLGCGFAFC
 RECKEAYHEGECSAVFEASGTTTQAYRVDERAAEQARWEAASKETIKKTTKP
 CPRCHVPVEKNGGCMHMKCPQPQCRLEWCWNCGCEWNRVCMGDHWFDV

Research Area	Apoptosis
Source	E.coli
Gene Names	PRKN
Expression Region	1-465aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	67.6kDa
Protein Description	Full Length

Image


(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.