

Parkin Antibody

Catalog No: #33464

Package Size: #33464-1 50ul #33464-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

Description

Product Name	Parkin Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	WB IHC
Species Reactivity	Human;Mouse;Rat
Specificity	The antibody detects endogenous levels of total Parkin protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from human Parkin antibody.
Conjugates	Unconjugated
Target Name	Parkin
Other Names	PARK2; PRKN; PRKN2; Parkinson disease protein 2; Parkinson juvenile disease protein 2
Accession No.	Swiss-Prot: O60260NCBI Gene ID: 5071
SDS-PAGE MW	52kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

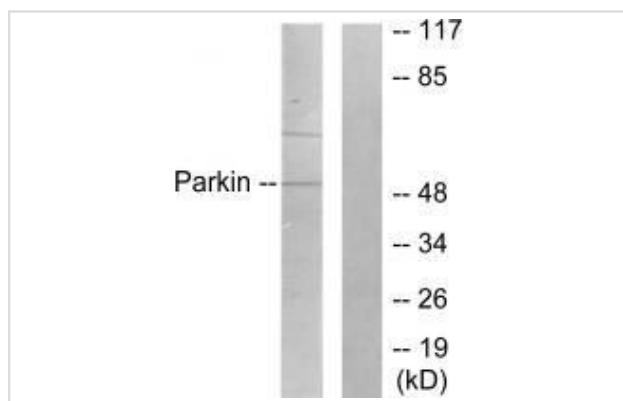
Western blotting: 1:500~1:3000

Immunohistochemistry: 1:50~1:100

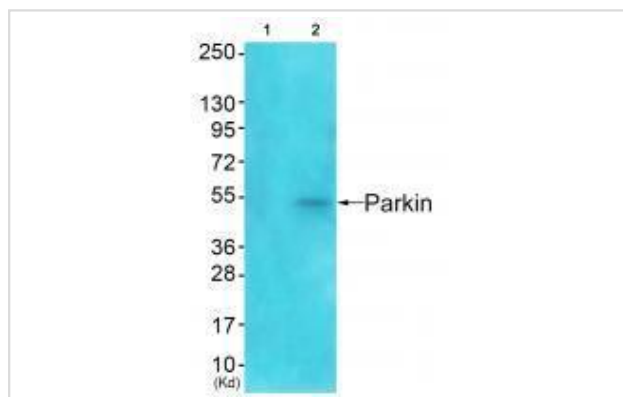
Images



Immunohistochemical analysis of paraffin-embedded human brain tissue using Parkin antibody #33464.



Western blot analysis of extracts from Jurkat cells, using Parkin antibody #33464.



Western blot analysis of extracts from Jurkat cells using Parkin antibody #33464. The lane on the left is treated with synthesized peptide.

Background

Functions within a multiprotein E3 ubiquitin ligase complex, catalyzing the covalent attachment of ubiquitin moieties onto substrate proteins, such as BCL2, SYT11, CCNE1, GPR37, STUB1, a 22 kDa O-linked glycosylated isoform of SNCAIP, SEPT5, ZNF746 and AIMP2. Mediates monoubiquitination as well as 'Lys-48'-linked and 'Lys-63'-linked polyubiquitination of substrates depending on the context. Participates in the removal 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 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), potentially by the ubiquitination of mitochondrial proteins. 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.

Fang Yang, J. Biol. Chem., Apr 2005; 280: 17154 - 17162.

Yukiko Kuroda, Hum. Mol. Genet., Mar 2006; 15: 883 - 895.

Iris H. Henn, J. Neurosci., Feb 2007; 27: 1868 - 1878.

Monica Joch, Mol. Biol. Cell, Jun 2007; 10.1091/mbc.E05-11-1027.

Published Papers

el at., Study of mitophagy and ATP-related metabolomics based on β -amyloid levels in Alzheimer's disease. In Exp Cell Res on 2020 Nov 1 by Xiaomin Xiong, Shijie Li, et al.. PMID: 32905804, , (2020)

[PMID:32905804](#)

Hanyu Chen;Qianbei Lin;Yanlin Zeng;Pinliang Chen;Pengpeng Guo;Ruoshui Feng;Zhenyu Guo;Jinhua Kang;Qiucen Chen;Xiaoxiong Zhou el at., Xinyin tablets affect mitophagy and cardiomyocyte apoptosis to alleviate chronic heart failure by regulating histone deacetylase 3(HDAC3)-mediated PTEN induced putative kinase 1(PINK1)/Parkin signaling pathway., , (2025)

[PMID:40122315](#)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.