

# PARK2/Parkin Mouse mAb[PW68]

Cat NO. :A76826

#### Information:

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB,IHC,ICC/IF	H,M	O60260	52kda	Mouse	IgG	100ul,200ul

Applications detail:

Application	Dilution			
WB	1:1000-2000			
IHC	1:100			
ICC/IF	1:100			
The optimal dilutions should be determined by the end user				

Conjugate:

UnConjugate

Form:

Liquid

sensitivity:

Endogenous

Purification:

Protein A purification

Specificity:

Antibody is produced by immunizing animals with a synthetic peptide of human PARK2/Parkin.

#### Storage buffer and conditions:

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at-20°C or -80°C.

 $\label{products} \textbf{Products are valid for one natural year of receipt.} \textbf{Avoid repeated freeze} \ \textit{I} \ \textbf{thaw cycles}.$ 

# Tissue specificity:

Highly expressed in the brain including the substantia nigra (PubMed:9560156, PubMed:19501131). Expressed in heart, testis and skeletal muscle (PubMed:9560156). Expression is down-regulated or absent

# Subcellular location:

Cytoplasm, cytosol. Nucleus. Endoplasmic reticulum. Mitochondrion. Mitochondrion outer membrane. Cell projection, neuron projection. Cell junction, synapse, postsynaptic density. Cell junction,

## Function:

Introduction: WB: Western Blot IP: Immunoprecipitation IHC: Immunohistochemistry ChIP: Chromatin Immunoprecipitation ICC/IF: Immunocytochemistry/
Immunofluorescence F: Flow Cytometry

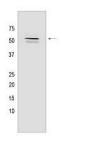
Cross Reactivity: H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Hr: horse



Functions within a multiprotein E3 ubiquitin ligase complex, catalyzing the covalent attachment of ubiquitin moieties onto substrate proteins (PubMed:10888878, PubMed:10973942, PubMed:11431533, PubMed:12150907, PubMed:12628165, PubMed:15105460, PubMed:16135753, PubMed:21376232, PubMed:21532592, PubMed:23754282, PubMed:23620051, PubMed:24660806, PubMed:24751536, PubMed:32047033, PubMed:29311685, PubMed:22396657). Substrates include SYT11 and VDAC1 (PubMed:32047033, PubMed:29311685). Other substrates are BCL2, CCNE1, GPR37, RHOT1/MIRO1, MFN1, MFN2, STUB1, SNCAIP, SEPTIN5, TOMM20, USP30, ZNF746, MIRO1 and AIMP2 (PubMed:10888878, PubMed:10973942, PubMed:11431533, PubMed:12150907, PubMed:12628165, PubMed:15105460, PubMed:16135753, PubMed:21376232, PubMed:21532592, PubMed:23754282, PubMed:23620051, PubMed:24660806, PubMed:24751536, PubMed:22396657). Mediates monoubiquitination as well as 'Lys-6', 'Lys-41', 'Lys-48'-linked and 'Lys-63'-linked polyubiquitination of substrates depending on the context (PubMed:19229105, PubMed:20889974, PubMed:25621951, PubMed:32047033, PubMed:25474007). 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 (PubMed:17846173, PubMed:19229105). Mediates 'Lys-63'-linked polyubiquitination of a 22 kDa O-linked glycosylated isoform of SNCAIP, possibly playing a role in Lewy-body formation (PubMed:11431533, PubMed:11590439, PubMed:15105460, PubMed:19229105, PubMed:15728840). Mediates monoubiquitination of BCL2, thereby acting as a positive regulator of autophagy (PubMed:20889974). Protects against mitochondrial dysfunction during cellular stress, by acting downstream of PINK1 to coordinate mitochondrial quality control mechanisms that remove and replace dysfunctional mitochondrial components (PubMed:32047033, PubMed:19029340, PubMed:19966284, PubMed:23620051, PubMed:24896179, PubMed:25527291, PubMed:18957282, PubMed:21376232, PubMed:22396657, PubMed:24660806, PubMed:25474007, PubMed:24784582, PubMed:11439185, PubMed:22082830, PubMed:23933751). Depending on the severity of mitochondrial damage and/or dysfunction, activity ranges from preventing apoptosis and stimulating mitochondrial biogenesis to regulating mitochondrial dynamics and eliminating severely damaged mitochondria via mitophagy (PubMed:32047033, PubMed:19029340, PubMed:19801972, PubMed:19966284, PubMed:23620051, PubMed:24896179, PubMed:25527291, PubMed:21376232, PubMed:22396657, PubMed:11439185, PubMed:22082830, PubMed:23933751, PubMed:33499712). Activation and recruitment onto the outer membrane of damaged/dysfunctional mitochondria (OMM) requires PINK1-mediated phosphorylation of both PRKN and ubiquitin (PubMed:24660806, PubMed:25474007, PubMed:24784582, PubMed:25527291). After mitochondrial

# **Validation Data:**

#### PARK2/Parkin Mouse mAb[PW68] Images



Western blot (SDS PAGE) analysis of extracts from HEK-293 cells. Using PARK2/Parkin Mouse mAb IgG [PW68] at dilution of 1:1000 incubated at  $4^{\circ}\mathrm{C}$  over night.

View more information on http://naturebios.com

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 1% w/v Milk, 1X TBST at 4°C overnight.