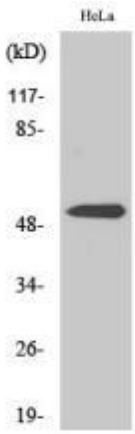
Parkin Monoclonal Antibody

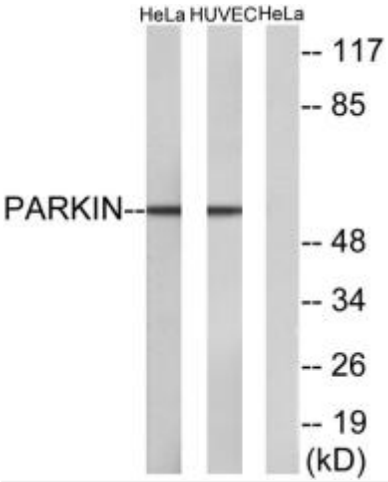
Catalog No	YP-mAb-12790
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	PARK2
Protein Name	E3 ubiquitin-protein ligase parkin
Immunogen	The antiserum was produced against synthesized peptide derived from human Parkin. AA range:101-150
Specificity	Parkin Monoclonal Antibody detects endogenous levels of Parkin protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PARK2; PRKN; E3 ubiquitin-protein ligase parkin; Parkinson juvenile disease protein 2; Parkinson disease protein 2
Observed Band	55kD
Cell Pathway	Cytoplasm, cytosol . Nucleus . Endoplasmic reticulum . Mitochondrion . Mitochondrion outer membrane . Cell projection, neuron projection . Cell junction, synapse, postsynaptic density . Cell junction, synapse, presynapse . Mainly localizes in the cytosol (PubMed:19029340, PubMed:19229105). Co-localizes with SYT11 in neutrites (PubMed:12925569). Co-localizes with SNCAIP in brainstem Lewy bodies (PubMed:10319893, PubMed:11431533). Translocates to dysfunctional mitochondria that have lost the mitochondrial membrane potential; recruitment to mitochondria is PINK1-dependent (PubMed:24898855, PubMed:18957282, PubMed:19966284, PubMed:23620051). Mitochondrial localization also gradually increases with cellular growth (PubMed:22082830). .
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 in tumor biopsies, and absent in the brain of PARK2 patients (PubMed:14614460, PubMed:12719539). Overexpression protects dopamine neurons from kainate-mediated apoptosis (PubMed:12628165). Found in serum (at protein level) (PubMed:19501131).

Function	disease:Defects in PARK2 are a cause of Parkinson disease (PD) [MIM:168600]. PD is a complex, multifactorial disorder that typically manifests after the age of 50 years, although early-onset cases (before 50 years) are known. PD generally arises as a sporadic condition but is occasionally inherited as a simple mendelian trait. Although sporadic and familial PD are very similar, inherited forms of the disease usually begin at earlier ages and are associated with atypical clinical features. PD is characterized by bradykinesia, resting tremor, muscular rigidity and postural instability, as well as by a clinically significant response to treatment with levodopa. The pathology of PD involves the loss of dopaminergic neurons in the substantia nigra and the presence of Lewy bodies (intraneuronal accumulations of aggregated proteins), in surviving neurons in various areas of the brain.,disease:D
Background	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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using Parkin Monoclonal Antibody



Western blot analysis of lysates from HeLa and HUVEC cells, using Parkin Antibody. The lane on the right is blocked with the synthesized peptide.