

Datasheet for 200-301-W64**PINK1 Antibody****Overview**

Description:	Anti-PINK1 (MOUSE) Monoclonal Antibody - 200-301-W64
Item No.:	200-301-W64
Size:	100 µg
Applications:	IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Mouse

Product Details

Background:	PINK1 (PTEN induced putative kinase 1) is a mitochondrial serine/threonine kinase which maintains mitochondrial function/integrity, provides protection against mitochondrial dysfunction during cellular stress, potentially by phosphorylating mitochondrial proteins, and is involved in the clearance of damaged mitochondria via selective autophagy (mitophagy). PINK1 is synthesized as a 63 kD protein which undergoes proteolytic processing to generate at least two cleaved forms (55 kD and 42 kD). PINK1 and its substrates have been found in the cytosol as well as in different sub-mitochondrial compartments, and according to the recent reports; PINK1 may be targeted to OMM (outer mitochondrial membrane) with its kinase domain facing the cytosol, providing a possible explanation for the observed physical interaction with the cytosolic E3 ubiquitin ligase Parkin. Defective PINK1 may cause alterations in processing, stability, localization and activity as well as binding to substrates/interaction-partners which ultimately leads to differential effects on mitochondrial function and morphology. Mutations in PINK1 are linked to autosomal recessive early onset Parkinson's disease, and are associated with loss of protective function, mitochondrial dysfunction, aggregation of alpha-synuclein, as well as proteasome dysfunction. Areas of interest and use for researchers include Neuroscience, mitochondrial function, and CDK-mediated phosphorylation pathways.
Synonyms:	Parkinson disease (autosomal recessive) 6, EC 2.7.11.1, PARK6, serine/threonine-protein kinase PINK1 mitochondrial, PTEN-induced putative kinase protein 1, protein kinase BRPK, BRPK, FLJ27236, PTEN induced putative kinase 1, Phosphatase and Tensin Homolog
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	S4-15

Format: IgG1

Target Details

Gene Name:	PINK1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Recombinant Protein
Immunogen:	Anti-PINK1 Antibody was produced by repeated immunization of mice with a fusion protein containing amino acids 112-496 of human PINK1.
Purity/Specificity:	Anti-PINK1 Antibody was purified from concentrated tissue culture supernate by Protein G chromatography. BLAST analysis suggests that it is 82% identical to rat, 81% identical to mouse and >30% identical to DMPK.
Relevant Links:	• NCBI - NP_115785.1 • UniProtKB - Q9BXM7.1 • GeneID - 65018

Application Details

Tested Applications:	IF, IHC, WB
Application Note:	Anti-PINK1 Antibody has been tested in WB, IHC, and ICC/IF. Expect a band approximately ~50 kDa on specific lysates or tissues. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
IF:	User Optimized
WB:	1:1000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1mg/mL by UV absorbance at 280 nm
Buffer:	1X PBS, pH 7.4
Preservative:	0.1% (w/v) Sodium Azide

Stabilizer: 50% (v/v) Glycerol

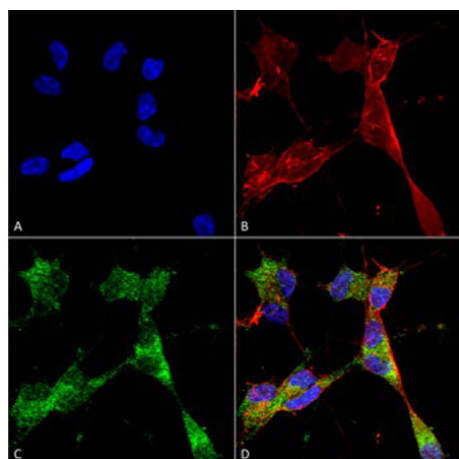
Shipping & Handling

Shipping Condition: Wet Ice

Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Immunofluorescence Microscopy

Immunofluorescence of Mouse Anti-PINK1 Monoclonal Antibody.

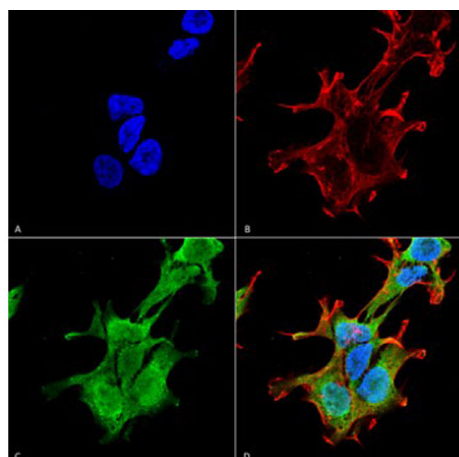
Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human.

Fixation: 4% PFA for 15 min.

Primary Antibody: Mouse Anti-PINK1 Monoclonal Antibody at 1:50 for overnight at 4°C.

Secondary Antibody: AlexaFluor 488 at 1:1000 for 1 hour at RT.

Counterstain: Phalloidin-iFluor 647 (red) F-Actin stain; Hoechst (blue) nuclear stain at 1:800, 1.6mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) PINK1 Antibody (D) Composite.



Immunofluorescence Microscopy

Immunofluorescence of Mouse Anti-PINK1 Monoclonal Antibody.

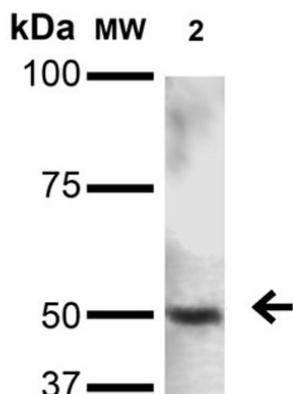
Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human.

Fixation: 4% Formaldehyde for 15 min at RT.

Primary Antibody: Mouse Anti-PINK1 Monoclonal Antibody at 1:100 for 60 min at RT.

Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT.

Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000; 1:5000 for 60 min RT, 5 min RT. Localization: Cytoplasm. Magnification: 60X. (A) DAPI (blue) nuclear stain. (B) Phalloidin Texas Red F-Actin stain. (C) PINK1 Antibody. (D) Composite.

**Western Blot**

Western Blot of Anti-PINK1.

Load: 15 µg. Lane 1: Molecular Weight Ladder. Lane 2: Rat Brain.

Block: 2% BSA and 2% Skim Milk in 1X TBST.

Primary Antibody: Mouse Anti-PINK1 Monoclonal Antibody at 1:200 for 16 hours at 4°C.

Secondary Antibody: Goat Anti-Mouse IgG HRP at 1:1000 for 1 hour RT.

Color Development: ECL solution for 6 min in RT.

Predicted/Observed Size: ~50 kDa.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.