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PINK1 Antibody
PINK1 Antibody, Clone S4-15
Catalog # ASM10284

Specification

PINK1 Antibody - Product Information

Application	ICC/IF, WB
Primary Accession	O9BXM7.1
Other Accession	NP_115785.1
Host	Mouse
Isotype	IgG1
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal

Description
Mouse Anti-Human PINK1 Monoclonal IgG1

Target/Specificity
Detects ~50kDa.

Other Names
Parkinson disease (autosomal recessive) 6 Antibody, EC 2.7.11.1 Antibody, PARK6 Antibody, serine/threonine-protein kinase PINK1 mitochondrial Antibody, PTEN-induced putative kinase protein 1 Antibody, protein kinase BRPK Antibody, BRPK Antibody, FLJ27236 Antibody, PTEN induced putative kinase 1 Antibody, Phosphatase and Tensin Homolog Antibody

Immunogen
Fusion protein amino acids 112-496 (cytoplasmic C-terminus) of human PINK1. 82% identical to rat and 81% identical to mouse. >30% identity with DMPK.

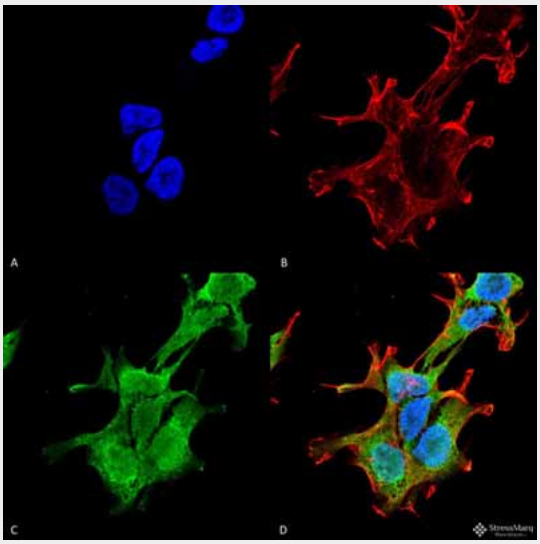
Purification
Protein G Purified

Storage	-20ºC

Storage Buffer
PBS pH 7.4, 50% glycerol, 0.1% sodium azide

Shipping Temperature	Blue Ice or 4ºC

Certificate of Analysis
1 µg/ml of SMC-450 was sufficient for detection of PINK1 in 20 µg of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-PINK1 Monoclonal Antibody, Clone S4-15 (ASM10284). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-PINK1 Monoclonal Antibody (ASM10284) 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.

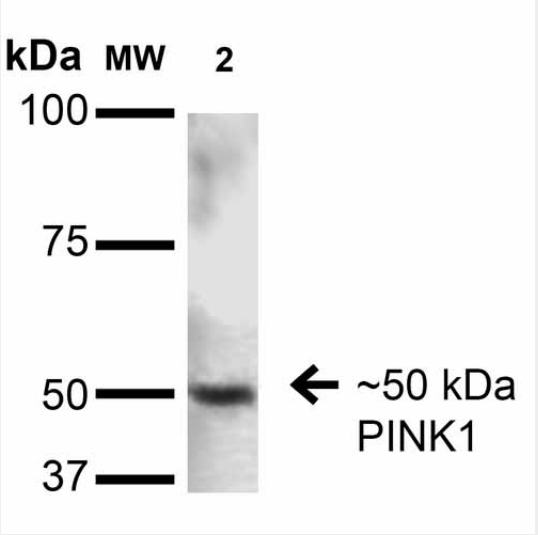
secondary antibody.

Cellular Localization
Mitochondrion | Mitochondrion Outer Membrane | Cytoplasm

PINK1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture



Western Blot analysis of Rat Brain showing detection of ~50 kDa PINK1 protein using Mouse Anti-PINK1 Monoclonal Antibody, Clone S4-15 (ASM10284). Lane 1: Molecular Weight Ladder. Lane 2: Rat Brain. Load: 15 µg. Block: 2% BSA and 2% Skim Milk in 1X TBST. Primary Antibody: Mouse Anti-PINK1 Monoclonal Antibody (ASM10284) 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.

PINK1 Antibody - 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 proteolyt 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.