

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

Specification

PINK1 Antibody - Product Information

Application	WB, IHC, ICC
Primary Accession	Q9BXM7.1
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 BPK Antibody, BPK 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 **-20°C**

Storage Buffer

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

Shipping Temperature **Blue Ice or 4°C**

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 secondary antibody.

Cellular Localization

Mitochondrion | Mitochondrion Outer Membrane | Cytoplasm

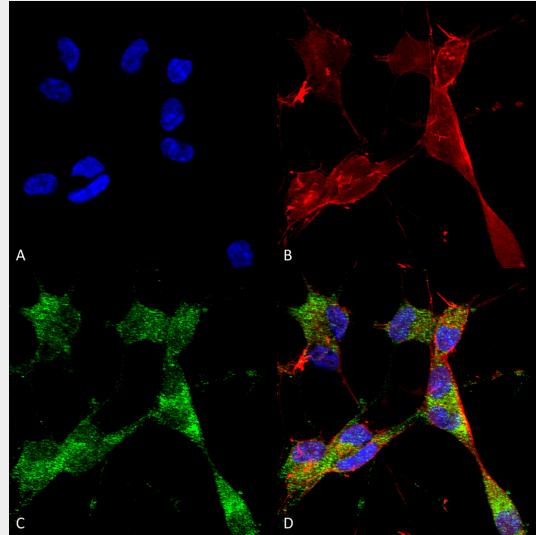
PINK1 Antibody - Protocols

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

- [Western Blot](#)

- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PINK1 Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-PINK1 Monoclonal Antibody, Clone N4/15 (ASM10284). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-PINK1 Monoclonal Antibody (ASM10284) at 1:50 for overnight at 4°C with slow rocking. 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.

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 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.