

# Anti-PINK1

Catalog# SMC-450D

Size: 100µg

PO Box 55036, Cadboro Bay  
3825 Cadboro Bay Road,  
Victoria, BC, V8N 4G0, Canada

This product is for *in vitro* research use only and is not intended for use in humans or animals

## StressMarq Biosciences Inc.

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Product	Mouse anti-PINK1 antibody; monoclonal
Clone	S4-15
Immunogen	Fusion protein amino acids 112-496 (cytoplasmic C-terminus) of human PINK1 (accession # Q9BZM7). 82% identical to rat and 81% identical to mouse. >30% identity with DMPK.
Host and Subclass	Mouse, IgG1
Cited Applications	WB, ICC, IHC
Specificity	Detects a 50 kDa protein corresponding to the molecular weight of PINK1
Species cross-reactivity	Human, Rat, Mouse
Format	Protein G purified in PBS pH 7.4, 0.09% Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> and 50% glycerol.
Concentration and Working Dilution	1mg/ml; 1:1000 (WB)
Storage and stability	-20°C; 1 year+; shipped on cold packs or ambient

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.

### Certificate of Analysis

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1µg/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.

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### Scientific 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.

# Material Safety Data Sheet

## Anti-PINK1 (Monoclonal Antibody) SMC-450

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The below information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. StressMarq shall not be held liable for any damage resulting from handling or from contact with the above product. See the Technical Specification, Packing Slip, Invoice, and Product Catalogue for additional terms and conditions of sale.

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### Hazardous Ingredients

The physical, chemical and toxicological properties of these components have not been fully investigated. It is recommended that all laboratory personnel follow standard laboratory safety procedures when handling this product. Safety procedures should include wearing OSHA approved safety glasses, gloves and protective clothing. Direct physical contact with this product should be avoided.

<u>Known Hazardous Components</u>	<u>CAS Number</u>	<u>Percent</u>
None		

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### Physical Data

This product consists of whole rabbit serum shipped on gel packs. The physical properties of this product have not been investigated thoroughly.

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### Fire and Explosion Hazard and Reactivity Data

NOT APPLICABLE

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### Toxicological Properties

May be harmful by inhalation, ingestion, or skin absorption. The toxicological properties of this product have not been investigated thoroughly. Exercise due caution.

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### Preventative Measures

Wear chemical safety goggles and compatible chemical-resistant gloves. Avoid inhalation, contact with eyes, skin or clothing.

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### Spill and Leak Procedures

Observe all federal, state and local environmental regulations.

- Wear protective equipment.
- Absorb on sand or vermiculite and place in closed containers for disposal.
- Dispose or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

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### First Aid Measures

- If swallowed, wash out mouth with water, provided person is conscious. Call a physician.
- In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. If a rash or other irritation develops, call a physician.
- If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.
- In case of eye contact, flush with copious amounts of water for at least 15 minutes while separating the eyelids with fingers. Call a physician.

Authorized: StressMarq Biosciences Inc.

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