

Product datasheet for TA336796

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PINK1 Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: ICC/IF, IHC, Simple Western

Recommended Dilution: Simple Western: 1:50, Immunocytochemistry/ Immunofluorescence: 1:50-1:1000,

Immunohistochemistry-Paraffin: 1:100, Immunohistochemistry: 1:100

Reactivity: Human, Mouse

Host: Rabbit

Clonality: Polyclonal

Immunogen: A genomic peptide made to an internal region of the human PINK1 protein (within residues

350-500). [Swiss-Prot Q9BXM7]

Formulation: PBS, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid

freeze-thaw cycles.

Concentration: lot specific

Purification: Immunogen affinity purified

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Gene Name: PTEN induced putative kinase 1

Database Link: NP 115785

Entrez Gene 68943 MouseEntrez Gene 65018 Human

Q9BXM7





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.

Synonyms: BRPK; PARK6

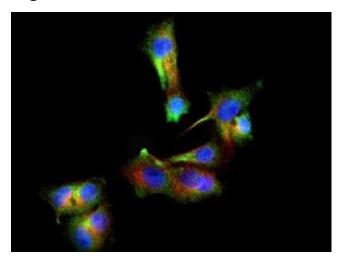
Note: This PINK1 antibody is useful for IHC and ICC/IF. Prior to immunostaining paraffin tissues,

antigen retrieval with sodium citrate buffer (pH 6.0) is recommended.

Protein Families: Druggable Genome, Protein Kinase

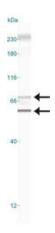
Protein Pathways: Parkinson's disease

Product images:

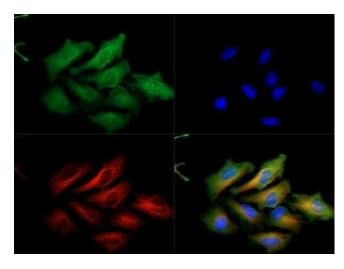


Immunocytochemistry/Immunofluorescence: PINK1 Antibody TA336796 - PINK1 antibody was tested in HepG2 cells with DyLight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and DyLight 550 (red).

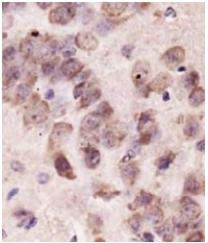




Simple Western: PINK1 Antibody TA336796 - Lane view shows a specific band for PINK1 at a dilution of 1:50 in 1.0 mg/ml of HeLa lysate. Molecular weight ~61kDa. This experiment was performed under reducing conditions using the 12-230kDa separation system. * Non-specific interaction with the 230 kDa Simple Western standard may be seen with this antibody.



Immunocytochemistry/Immunofluorescence: PINK1 Antibody TA336796 - PINK1 antibody was tested at 1:50 in HeLa cells with DyLight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and DyLight 550 (red). Image objective 40x.



Immunohistochemistry-Paraffin: PINK1 Antibody TA336796 - Stain in paraffin embedded mouse brain.