

ARG55419 anti-PINK1 antibody

Package: 100 μl Store at: -20°C

Summary

| Product Description | Mouse Monoclonal antibody recognizes PINK1 | | |
|---------------------|--|--|--|
| Tested Reactivity | Hu, Ms, Rat | | |
| Tested Application | ICC/IF, IHC-P, WB | | |
| Host | Mouse | | |
| Clonality | Monoclonal | | |
| Clone | 38CT20.8.5 | | |
| Isotype | lgG1 | | |
| Target Name | PINK1 | | |
| Species | Human | | |
| Immunogen | Recombinant Human PINK1 protein. | | |
| Conjugation | Un-conjugated | | |
| Alternate Names | PARK6; BRPK; PTEN-induced putative kinase protein 1; Serine/threonine-protein kinase PINK1, mitochondrial; EC 2.7.11.1 | | |

Application Instructions

| Application table | Application | Dilution | |
|-------------------|--|---------------|--|
| | ICC/IF | 1:25 | |
| | IHC-P | 1:50 - 1:100 | |
| | WB | 1:100 - 1:500 | |
| Application Note | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. | | |
| Positive Control | A431 | | |

Properties

| Form | Liquid |
|---------------------|---|
| Purification | Purification with Protein G. |
| Buffer | PBS and 0.09% (W/V) Sodium azide |
| Preservative | 0.09% (W/V) Sodium azide |
| Storage instruction | For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use. |

Bioinformation

| Database links | GenelD: 65018 Human | | | |
|-----------------------|--|--|--|--|
| | GenelD: 68943 Mouse | | | |
| | Swiss-port # Q99MQ3 Mouse | | | |
| | Swiss-port # Q9BXM7 Human | | | |
| Gene Symbol | PINK1 | | | |
| Gene Full Name | PTEN induced putative kinase 1 | | | |
| Background | This gene encodes a serine/threonine protein kinase that localizes to mitochondria. It is thought to protect cells from stress-induced mitochondrial dysfunction. Mutations in this gene cause one form of autosomal recessive early-onset Parkinson disease. [provided by RefSeq, Jul 2008] | | | |
| Function | Protects against mitochondrial dysfunction during cellular stress by phosphorylating mitochondrial proteins. Involved in the clearance of damaged mitochondria via selective autophagy (mitophagy) by mediating activation and translocation of PARK2. Targets PARK2 to dysfunctional depolarized mitochondria through the phosphorylation of MFN2. Activates PARK2 in 2 steps: (1) by mediating phosphorylation at 'Ser-65' of PARK2 and (2) mediating phosphorylation of ubiquitin, converting PARK2 to its fully-active form. [UniProt] | | | |
| Highlight | Related products: <u>PINK1 antibodies: Anti-Mouse IgG secondary antibodies:</u> Related news: <u>Astrocyte-to-neuron conversion for Parkinson's disease treatment</u> | | | |
| Research Area | Cell Biology and Cellular Response antibody; Metabolism antibody; Neuroscience antibody; Signaling Transduction antibody | | | |
| Calculated Mw | 63 kDa | | | |
| PTM | Autophosphorylation at Ser-228 and Ser-402 is essential for Parkin/PRKN recruitment to depolarized mitochondria. Two shorter forms of 55 kDa and 48 kDa seem to be produced by proteolytic cleavage and localize mainly in cytosol. | | | |
| Cellular Localization | Mitochondrion outer membrane; Single-pass membrane protein. Cytoplasm, cytosol | | | |

Images



ARG55419 anti-PINK1 antibody ICC/IF image

Immunofluorescence: PC12 cells stained with ARG55419 anti-PINK1 antibody (green) at 1:25 dilution. Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



ARG55419 anti-PINK1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human heart section stained with ARG55419 anti-PINK1 antibody at 1:25 dilution.

| | - | 98 | |
|------|---|----|--|
| | - | 72 | |
| - | - | 55 | |
| | - | 36 | |
| | - | 24 | |
| A431 | L | | |

ARG55419 anti-PINK1 antibody WB image

Western blot: 20 μg of A431 cell lysate stained with ARG55419 anti-PINK1 antibody at 1:1000 dilution.