Product Datasheet

PINK1 Antibody - BSA Free

NB100-493

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

Publications: 12

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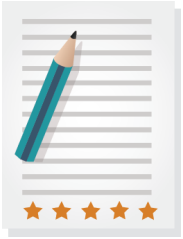
Updated 2/21/2025 v.20.1



NB100-493

PINK1 Antibody - BSA Free

Product Information	
Unit Size	0.1 ml
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS
Target Molecular Weight	62.7 kDa

Product Description	
Host	Rabbit
Gene ID	65018
Gene Symbol	PINK1
Species	Human, Mouse, Rat
Reactivity Notes	Rat (PMID: 24411077) and mouse (PMID: 21760537) reactivity reported in scientific literature
Specificity/Sensitivity	PINK1 Antibody is expected recognize isoform 1 but will not recognize isoform 2.
Immunogen	PINK1 antibody was developed using an N-terminal region synthetic peptide made to the human PINK1 protein sequence (between residues 1-50). [UniProt# Q9BXM7]

Product Application Details	
Applications	Western Blot
Recommended Dilutions	Western Blot 2 ug/ml
Application Notes	This PINK1 antibody is useful for Western blot, where a band is seen ~63 kDa. The observed molecular weight of the protein may vary from the listed predicted molecular weight due to post translational modifications, post translation cleavages, relative charges, and other experimental factors. Unprocessed PINK1 is 63 kDa which undergoes proteolytic processing to generate 55 kDa and 42 kDa cleaved forms. This antibody is made to a region that lies within the mitochondrial targeting sequence and is cleaved off to generate a mature protein.

Images

Western Blot: PINK1 Antibody [NB100-493] - Detection of murine PINK1 using NB100-493.

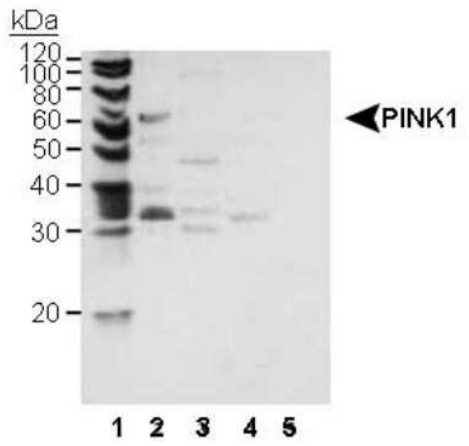
Lane 1: molecular weight marker.

Lane 2. MES cell Mitochondria (20 ug) with a band at the observed molecular weight of 63 kDa.

Lane 3. MES cytosol (20 ug).

Lane 4. MES nuclear (20 ug) as negative control.

Lane 5. Purified human cytochrome C (0.1 ug) as PINK1 negative control.



Publications

Hu WF, Lee CH, Pang CY et Al. Mitigating mitochondrial dysfunction and neuroinflammation by hematoma aspiration in a new surgical model for severe intracerebral hemorrhage Exp Neurol 2024-12-07 [PMID: 39653108]

Kaur, B;Miglioranza Scavuzzi, B;Yang, M;Yao, J;Jia, L;Abcouwer, SF;Zacks, DN; ER Stress and Mitochondrial Perturbations Regulate Cell Death in Retinal Detachment: Exploring the Role of HIF1? Investigative ophthalmology & visual science 2024-09-03 [PMID: 39325470]

Casey R Appell, Nigel C Jiwan, Rui Wang, Chwan-Li Shen, Hui-Ying Luk Ginger Supplementation Attenuated Mitochondrial Fusion and Improved Skeletal Muscle Size in Type 2 Diabetic Rats. In vivo (Athens, Greece) 2023-12-28 [PMID: 38148056]

Maheshwari C, Vidoni C, Titone R et al. Isolation, Characterization, and Autophagy Function of BECN1-Splicing Isoforms in Cancer Cells Biomolecules 2022-08-02 [PMID: 36008963] (WB, Human)

Chiang S, Braidy N, Maleki S et al. Mechanisms of impaired mitochondrial homeostasis and NAD+ metabolism in a model of mitochondrial heart disease exhibiting redox active iron accumulation Redox Biol 2021-08-20 [PMID: 34416478]

Ramasubramanian B, Griffith C, Hanson M et al. Protective Effects of Chaya against Mitochondrial and Synaptic Toxicities in the Type 2 Diabetes Mouse Model TallyHO Cells 2022-02-21 [PMID: 35203393] (WB, IF/IHC, Mouse)

Kim Sj, Cheresh P, Jablonski Rp et Al. Mitochondrial 8-Oxoguanine DNA Glycosylase Mitigates Alveolar Epithelial Cell PINK1 Deficiency, Mitochondrial DNA Damage, Apoptosis and Lung Fibrosis Am. J. Physiol. Lung Cell Mol. Physiol. 2020-03-25 [PMID: 32209025] (WB, Mouse)

Hwang, SH;Kim, MC;Ji, S;Yang, Y;Jeong, Y;Kim, Y; Glucose starvation induces resistance to metformin through the elevation of mitochondrial multidrug resistance protein 1 Cancer Sci. 2019-04-01 [PMID: 30689265] (WB, Human)

Amadoro G, Corsetti V, Florenzano F et al. AD-linked, toxic NH2 human tau affects the quality control of mitochondria in neurons. Neurobiol. Dis. 2014-02-01 [PMID: 24411077] (WB, Rat)

Yasuda T, Hayakawa H, Nihira T et al. Parkin-mediated protection of dopaminergic neurons in a chronic MPTP-minipump mouse model of Parkinson disease J Neuropathol Exp Neurol 2011-08-01 [PMID: 21760537] (WB, Mouse)

Lutz AK, Exner N, Fett ME et al. Loss of Parkin or PINK1 Function Increases Drp1-dependent Mitochondrial Fragmentation. J Biol Chem;284(34):22938-22951. 2009-01-01 [PMID: 19546216]

Exner N, Treske B, Paquet D et al. Loss-of-function of human PINK1 results in mitochondrial pathology and can be rescued by parkin. J Neurosci;27(45):12413-8. 2007-11-07 [PMID: 17989306] (WB, Human)

Procedures

Western Blot protocol for PINK1 Antibody (NB100-493)
Western Blot Protocol

1. Perform SDS-PAGE on samples to be analyzed, loading 10-25 ug of total protein per lane.
2. Transfer proteins to PVDF membrane according to the instructions provided by the manufacturer of the membrane and transfer apparatus.
3. Stain the membrane with Ponceau S (or similar product) to assess transfer success, and mark molecular weight standards where appropriate.
4. Rinse the blot TBS -0.05% Tween 20 (TBST).
5. Block the membrane in 5% Non-fat milk in TBST (blocking buffer) for at least 1 hour.
6. Wash the membrane in TBST three times for 10 minutes each.
7. Dilute primary antibody in blocking buffer and incubate overnight at 4C with gentle rocking.
8. Wash the membrane in TBST three times for 10 minutes each.
9. Incubate the membrane in diluted HRP conjugated secondary antibody in blocking buffer (as per manufacturer's instructions) for 1 hour at room temperature.
10. Wash the blot in TBST three times for 10 minutes each (this step can be repeated as required to reduce background).
11. Apply the detection reagent of choice in accordance with the manufacturer's instructions.

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Products Related to NB100-493

NB100-493PEP	PINK1 Antibody Blocking Peptide
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

Limitations
This product is for research use only and is not approved for use in humans or in clinical diagnosis.
Primary Antibodies are guaranteed for 1 year from date of receipt.

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