

Product Datasheet

RIPK1/RIP1 Antibody - BSA Free NBP1-77077

Unit Size: 0.1 mg

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

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NBP1-77077

RIPK1/RIP1 Antibody - BSA Free

Product Information

Unit Size	0.1 mg
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	Peptide affinity purified
Buffer	PBS
Target Molecular Weight	70.7 kDa

Product Description

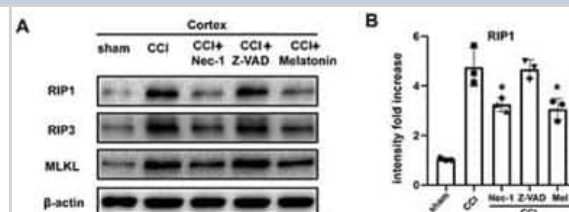
Host	Rabbit
Gene ID	8737
Gene Symbol	RIPK1
Species	Human, Mouse, Rat
Immunogen	Antibody was raised against a 15 amino acid synthetic peptide from near the amino terminus of human RIPK1. The immunogen is located within amino acids 180 - 230 of RIPK1. Amino Acid Sequence: DVNAKPTEKSDVYS

Product Application Details

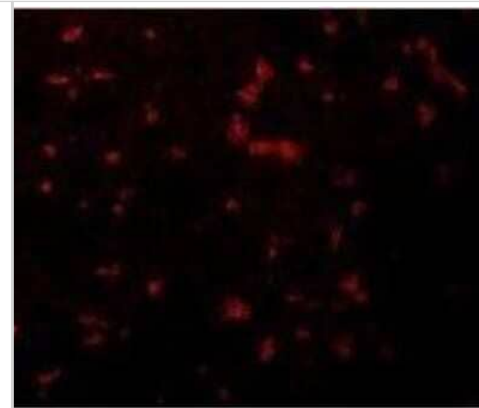
Applications	Western Blot, ELISA, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Knockdown Validated
Recommended Dilutions	Western Blot 1 ug/ml, ELISA 1:100-1:2000, Immunohistochemistry 2.5 ug/ml, Immunocytochemistry/ Immunofluorescence 20 ug/ml, Immunohistochemistry-Paraffin 2.5 ug/ml, Knockdown Validated

Images

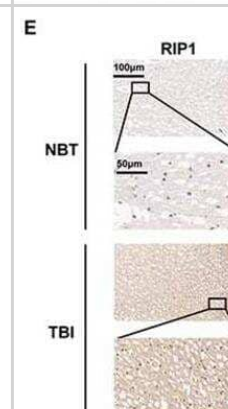
Western Blot: RIPK1/RIP1 Antibody [NBP1-77077] - At 6 h after CCI, RIP1 protein levels in the cortex detected by western blotting were decreased in Nec-1 and melatonin pretreatment groups, but there was no change in the Z-VAD pretreatment group. Values are represented as means \pm SEM (n = 3). B-actin was used as a control in western blot assays. All data were analyzed by one way ANOVA plus Tukey's test. *P < 0.05 and **P < 0.01 vs. CCI group. Image collected and cropped by CiteAb from the following publication (<https://www.frontiersin.org/article/10.3389/fnmol.2019.00222/full>) licensed under a CC-BY license.



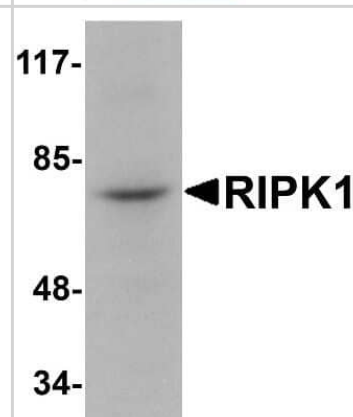
Immunocytochemistry/Immunofluorescence: RIPK1/RIP1 Antibody [NBP1-77077] - Mouse Kidney cells with RIPK1 antibody at 20 ug/mL.



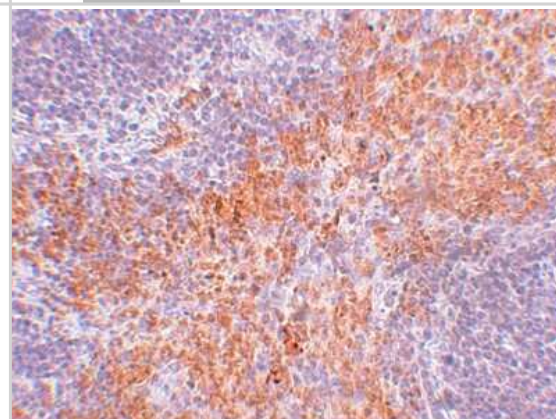
Immunohistochemistry: RIPK1/RIP1 Antibody [NBP1-77077] - Traumatic brain injury (TBI) tissues show increased necroptosis compared with normal brain tissues (NBTs). The expression of RIP1 was tested in NBT and TBI tissues from Jiangsu Province Hospital by immunohistochemistry. Image collected and cropped by CiteAb from the following publication (<https://www.frontiersin.org/article/10.3389/fnmol.2019.00222/full>) licensed under a CC-BY license.



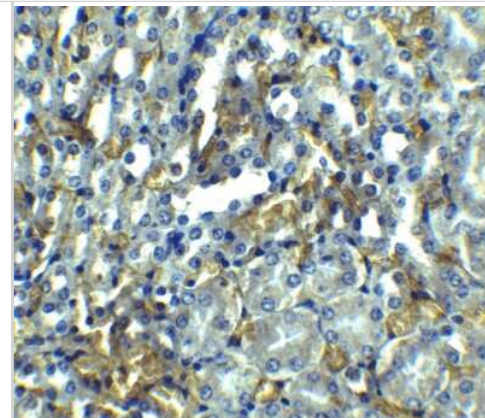
Western Blot: RIPK1/RIP1 Antibody [NBP1-77077] - Rat kidney tissue lysate with RIPK1 antibody at 1 ug/mL.



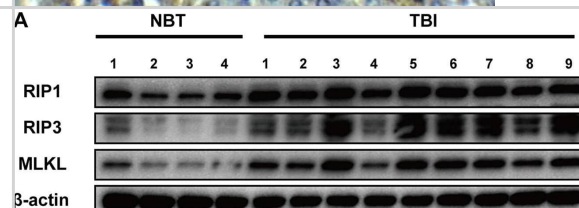
Immunohistochemistry-Paraffin: RIPK1/RIP1 Antibody [NBP1-77077] - Mouse kidney tissue with RIPK1 antibody at 2.5 ug/ml.



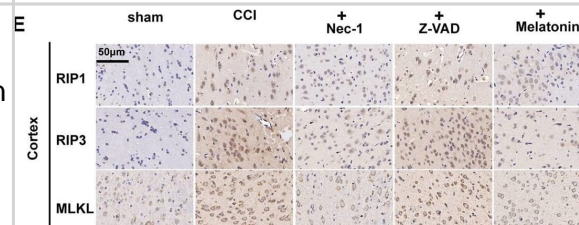
Immunohistochemistry-Paraffin: RIPK1/RIP1 Antibody [NBP1-77077] - Staining of mouse kidney tissue with antibody at 2.5 ug/ml.



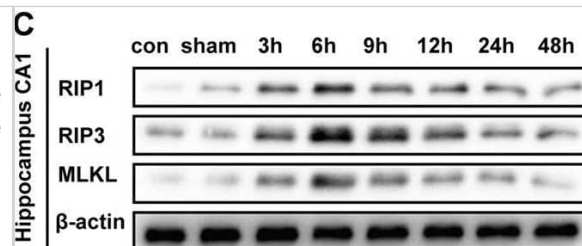
Western Blot: RIPK1/RIP1 Antibody - BSA Free [NBP1-77077] - Traumatic brain injury (TBI) tissues show increased necroptosis compared with normal brain tissues (NBTs). (A) The protein expressions of receptor-interacting protein 1 (RIP1), RIP3 & mixed lineage kinase domain-like protein (MLKL) were analyzed in human NBT (n = 4) & TBI tissues (n = 9) via western blotting. β -actin was used as a control. (B–D) Protein expression of RIP1, RIP3 & MLKL was analyzed by statistical. (E) The expressions of RIP1, RIP3 & MLKL were tested in NBT & TBI tissues from Jiangsu Province Hospital by immunohistochemistry. (F) Electron microscopy was used to examine human normal brain & TBI tissues. Intact cell membrane (violet arrow) is labeled in NBT. Complete & continuous nuclear membrane (black arrow), swollen mitochondria (green arrow) & vacuoles (red arrow) are labeled in TBI tissues. All data were analyzed by one way analysis of variance (ANOVA) plus Tukey's test. $**P < 0.01$ vs. NBT group. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/31607859>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



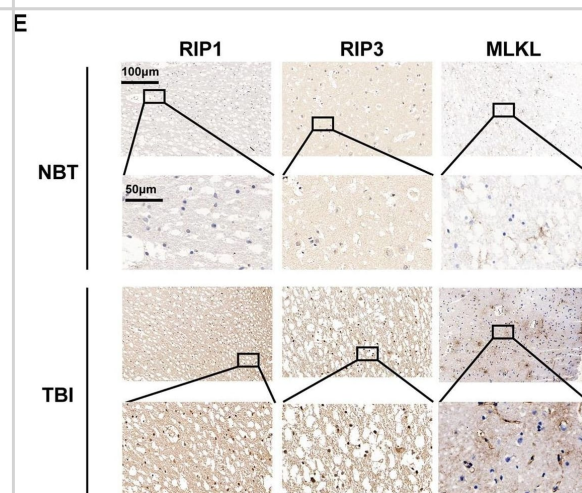
Immunohistochemistry: RIPK1/RIP1 Antibody - BSA Free [NBP1-77077] - Effect of Nec-1, Z-VAD & melatonin on necroptosis. (A) At 6 h after CCI, RIP1, RIP3 & MLKL protein levels in the cortex detected by western blotting were decreased in Nec-1 & melatonin pretreatment groups, but there was no change in the Z-VAD pretreatment group. (B–D) Protein expression of RIP1, RIP3 & MLKL was analyzed by statistical. (E) Immunohistochemistry assays examined the effect of Nec-1, Z-VAD & melatonin on cortex RIP1, RIP3 & MLKL, respectively. (F) At 6 h after CCI, RIP1, RIP3 & MLKL protein levels in the hippocampus CA1 detected by western blotting were decreased in the Nec-1 & melatonin pretreatment groups, but not the Z-VAD pretreatment group. (G–I) Protein expression of RIP1, RIP3 & MLKL was analyzed by statistical. (J) Immunohistochemistry assays examined the effect of Nec-1, Z-VAD & melatonin on RIP1, RIP3 & MLKL in hippocampus CA1, respectively. (K) TdT-mediated dUTP Nick-End Labeling (TUNEL; green) & cleaved caspase-3 (red) dual immunofluorescent labeling was used & were analyzed by statistical (L,M) in the five groups. Values are represented as means \pm SEM (n = 3). β -actin was used as a control in western blot assays. All data were analyzed by one way ANOVA plus Tukey's test. $*P < 0.05$ & $**P < 0.01$ vs. CCI group. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/31607859>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



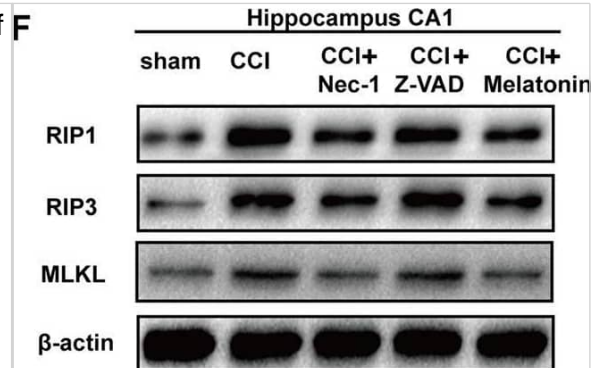
Western Blot: RIPK1/RIP1 Antibody - BSA Free [NBP1-77077] - Tissues were obtained to perform western blot assays. (A) Location of collected tissues was labeled. Collected cortical tissues & hippocampus CA1 were marked by white & yellow frame, respectively. RIP1, RIP3 & MLKL in the (B) cortex & (C) hippocampus CA1 were examined via western blot from 0 h to 48 h after controlled cortical impact (CCI). Protein expression of RIP1, RIP3 & MLKL in the (D–F) cortex & (G–I) hippocampus CA1 from 0 h to 48 h after CCI was analyzed by statistical. Values are represented as means \pm SEM (n = 3–4). (J) Cleaved caspase-3 was detected in cortex & hippocampus CA1 via western blotting from 0 h to 48 h after CCI. (K,L) Protein expression of cleaved caspase-3 in the cortex & hippocampus CA1 from 0 h to 48 h after CCI was measured. Values are represented as means \pm SEM (n = 4–5). (M) Cleaved caspase-8 was detected in cortex & hippocampus CA1 via western blotting from 0 h to 48 h after CCI. (N,O) Protein expression of cleaved caspase-8 in the cortex & hippocampus CA1 from 0 h to 48 h after CCI was analyzed. Values are represented as means \pm SEM (n = 4–5). β -actin was used as a control in western blot assays. All data were analyzed by one way ANOVA plus Tukey's test. *P < 0.05 & **P < 0.01 vs. sham group. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/31607859>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



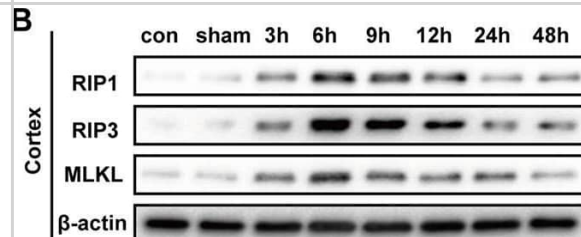
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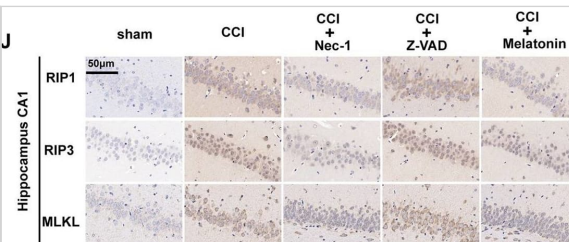
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Publications

Miyake, K;Ito, J;Takahashi, K;Nakabayashi, J;Brombacher, F;Shichino, S;Yoshikawa, S;Miyake, S;Karasuyama, H; Single-cell transcriptomics identifies the differentiation trajectory from inflammatory monocytes to pro-resolving macrophages in a mouse skin allergy model *Nature communications* 2024-02-23 [PMID: 38396021]

Thadathil N, Nicklas EH, Mohammed S et al. Necroptosis increases with age in the brain and contributes to age-related neuroinflammation *GeroScience* 2021-10-01 [PMID: 34515928] (Block/Neutralize)

Miyake K, Ito J, Takahashi K et al. Single-cell transcriptomics identifies the differentiation trajectory from inflammatory monocytes to pro-resolving macrophages in skin allergy *Research Square* 2023-03-23 (IHC, Mouse)

Shao R, Xie Q, Pan L et al. Necrostatin-1 attenuates Caspase-1-dependent pyroptosis induced by the RIPK1/ZBP1 pathway in ventilator-induced lung injury *Cytokine* 2022-09-01 [PMID: 35780712]

Liu K, Huang J, Liu J et al. Induction of autophagy-dependent ferroptosis to eliminate drug-tolerant human retinoblastoma cells *Cell death & disease* 2022-06-02 [PMID: 35654783] (WB, Human)

Lorenzo N, Sanavia T, Rocco C et al. Necroptosis driving genes RIPK1, RIPK3, and MLKL-p are associated with intratumoral CD3+ and CD8+ T-cell density and predict prognosis in Hepatocellular Carcinoma *Journal for ImmunoTherapy of Cancer* 2022-01-01 [PMID: 35264437]

Kamiya M, Mizoguchi F, Kawahata K et al. Targeting necroptosis in muscle fibers ameliorates inflammatory myopathies *Nature communications* 2022-01-10 [PMID: 35013338] (ICC/IF, Mouse)

Pesce NA, Canovai A, Plastino F Et al. An imbalance in autophagy contributes to retinal damage in a rat model of oxygen-induced retinopathy *Journal of cellular and molecular medicine* 2021-10-08 [PMID: 34623024] (WB, ICC/IF, Rat)

Naseroleslami M, Niri NM, Akbarzade I et al. Simvastatin-loaded nano-niosomes confer cardioprotection against myocardial ischemia/reperfusion injury *Drug delivery and translational research* 2021-06-24 [PMID: 34165730]

Sharifi M, Nazarinia D, Ramezani F et al. Necroptosis and RhoA/ROCK pathways: molecular targets of Nesfatin-1 in cardioprotection against myocardial ischemia/reperfusion injury in a rat model *Molecular biology reports* 2021-03-23 [PMID: 33755849]

Zhao Y, Zhu X, Zhang L et al. Mesenchymal stem/stromal cells and their extracellular vesicle progeny decrease injury in post-stenotic swine kidney through different mechanisms *Stem Cells Dev.* 2020-07-12 [PMID: 32657229]

Li J, Shi J, Pan Y et al. Transcription modulation by CDK9 regulates inflammatory genes and RIPK3-MLKL-mediated necroptosis in periodontitis progression *Sci Rep.* 2019-11-22 [PMID: 31758083] (WB, Mouse)

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NBP1-77077PEP	RIPK1/RIP1 Antibody Blocking Peptide
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NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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