Product Datasheet

Caspase-9 Antibody
NB100-56118

Unit Size: 0.05 ml

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

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Reviews: 1 Publications: 28

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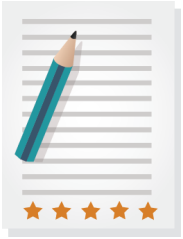
Updated 10/23/2024 v.20.1



NB100-56118

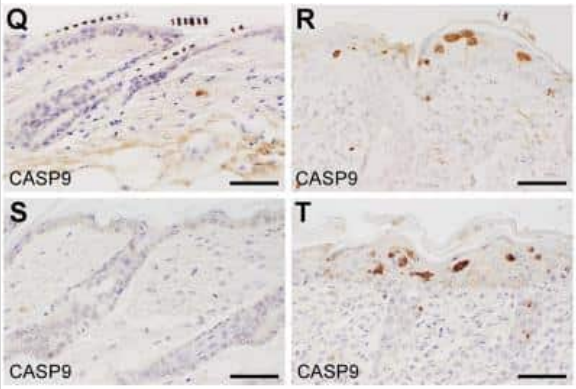
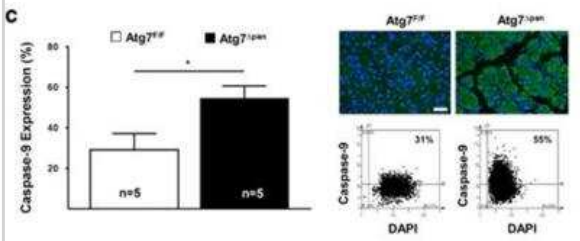
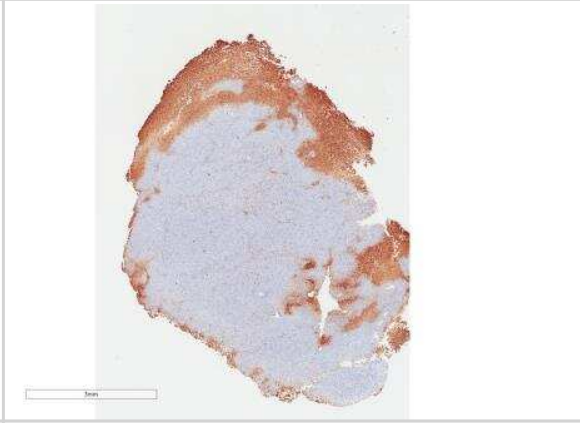
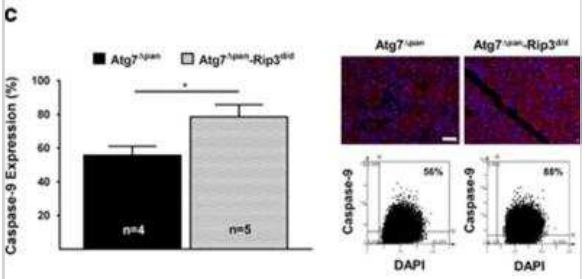
Caspase-9 Antibody

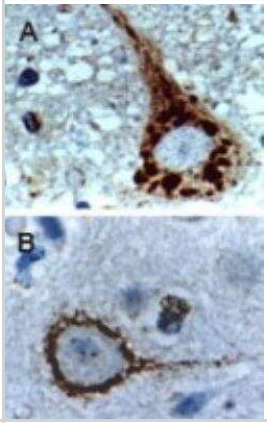
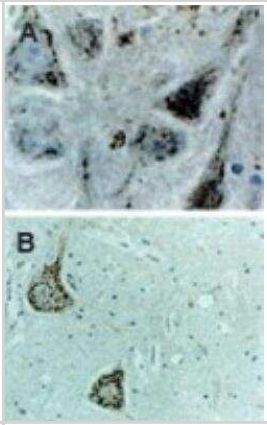
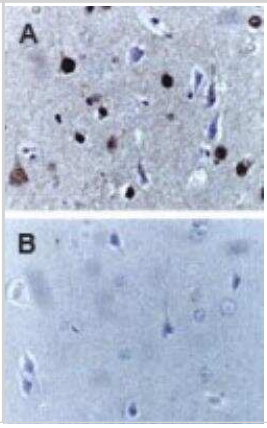
Product Information	
Unit Size	0.05 ml
Concentration	This product is unpurified. The exact concentration of antibody is not quantifiable.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide
Isotype	IgG
Purity	Unpurified
Buffer	Whole antisera

Product Description	
Host	Rabbit
Gene ID	842
Gene Symbol	CASP9
Species	Human, Mouse, Rat, Canine, Gerbil
Immunogen	Human Caspase 9 recombinant protein catalytic subunits (NP_001220).

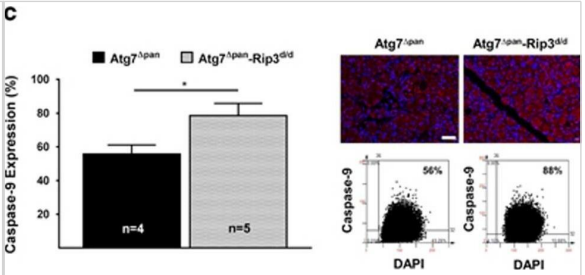
Product Application Details	
Applications	Western Blot, Flow (Intracellular), Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Immunoprecipitation
Recommended Dilutions	Western Blot reported in scientific literature (PMID 24184144), Immunohistochemistry, Immunocytochemistry/ Immunofluorescence reported in scientific literature (PMID 22223358), Immunoprecipitation 1:50-1:200, Immunohistochemistry-Paraffin 1:1000-1:5000, Immunohistochemistry-Frozen Assay Dependent, Flow (Intracellular)
Application Notes	Caspase-9 immunostaining may appear diffuse or punctate. It may be localized in the cytosol, mitochondria, and nucleus. Caspase-9 staining in the nucleus is considered to be an indication of active Caspase-9. Both pro and active/cleaved Caspase-9 staining may also be seen in the mitochondria. Caspase antibodies are classical tools for detecting inactive (pro) and active (cleaved) forms of the enzymes. The presence of the large or small subunits in western blots is considered to be a marker of caspase activation: the proform of caspase-9 is detected at ~50 kDa, the large subunit at ~35 kDa, and the small subunit at ~15 kDa. Intermediate caspase-9 cleavage forms may also be seen at ~21 kDa.

Images

Immunohistochemistry: Caspase-9 Antibody [NB100-56118] - Mice with two different spontaneous mutant alleles of Sharpin show variations in onset of CPDM phenotype. However, the onset is much more rapid in Sharpincpdm-Dem mice as evidenced by antibody detection of cleaved CASPASE 9 (T) when compared to Sharpincpdm mutants (R) or WT mice (Q,S). . Image collected and cropped by CiteAb from the following publication (//doi.org/10.1371/journal.pone.0085666) licensed under a CC-BY license.	
Immunohistochemistry: Caspase-9 Antibody [NB100-56118] - Autophagy-deficient mice showed increased activity of apoptosis and necroptosis. Increased the expression of Caspase-9 in 12-week-old Atg7deltapan mice. Caspase-9 quantitation and representative IF microphotographs of Atg7F/F (n=5) and Atg7deltapan (n=5) pancreatic tissue stained for DAPI (blue) and Caspase-9 (green) (1/1000, scale bar=50?um. Image collected and cropped by CiteAb from the following publication (https://www.nature.com/doifinder/10.1038/cddis.2017.313), licensed under a CC-BY license.	
Immunohistochemistry-Paraffin: Caspase-9 Antibody [NB100-56118] - Analysis of Capase-9 in mouse transplanted lung tumor section using anti-Caspase-9 antibody. Image from verified customer review.	
Immunohistochemistry: Caspase-9 Antibody [NB100-56118] - Exacerbated apoptosis and altered inflammation in double-deficient Atg7deltapan-Rip3-/- mice. (c) Depletion of Rip3 and pancreatic Atg7 (Atg7deltapan-Rip3d/d) increased pancreatic caspase-9 in 12-week-old mice. Caspase-9 quantitation and representative IF microphotographs of Atg7deltapan (n=5) and Atg7deltapan-Rip3d/d (n=5) pancreatic tissue stained for DAPI (blue) and Caspase-9 (red) (1/1000).. Image collected and cropped by CiteAb from the following publication (https://www.nature.com/doifinder/10.1038/cddis.2017.313), licensed under a CC-BY license.	

Immunohistochemistry-Paraffin: Caspase-9 Antibody [NB100-56118] - Analysis of Dog Brain sections stained for Active/Cleaved Caspase-9 expression at 1:2000. A and B. The pattern of Caspase-9 staining may vary between different types of neurons. Hematoxylin-eosin counterstain.	
Immunohistochemistry-Paraffin: Caspase-9 Antibody [NB100-56118] - Analysis of Dog Brain sections stained for cleaved Caspase-9 expression using this antibody at 1:2000. A) Section from a dog brain 2 hr after reperfusion injury. B) ection from a dog brain sham control (brain surgery but no injury). Hematoxylin-eosin counterstain.	
Immunohistochemistry-Paraffin: Caspase-9 Antibody [NB100-56118] - Analysis Human Brain sections stained for cleaved Caspase-9 expression using this antibody at 1:2000. A) Section from a patient 24 hr after head trauma. B) Control: section from a patient with no known neurological disease or head injury. Hematoxylin-eosin counterstain.	

Immunocytochemistry/ Immunofluorescence: Caspase-9 Antibody [NB100-56118] - Exacerbated apoptosis & altered inflammation in double-deficient Atg7Δpan-Rip3−/− mice. (a) Depletion of Rip3 & pancreatic Atg7 (Atg7Δpan-Rip3d/d) increased pancreatic caspase-3 in 12-week-old mice. Caspase-3 quantitation & representative IF microphotographs of Atg7Δpan (n=5) & Atg7Δpan-Rip3d/d (n=5) pancreatic tissue stained for DAPI (blue) & Caspase-3 (red) (anti-active caspase-3 ab2302, 1/50, scale bar=50 µm). (b) Depletion of Rip3 & pancreatic Atg7 (Atg7Δpan-Rip3d/d) increased pancreatic Bax in 12-week-old mice. Bax quantitation & representative IF microphotographs of Atg7Δpan (n=5) & Atg7Δpan-Rip3d/d (n=5) pancreatic tissue stained for DAPI (blue) & Caspase-3 (red) (anti-Bax (sc-526, 1/50). (c) Depletion of Rip3 & pancreatic Atg7 (Atg7Δpan-Rip3d/d) increased pancreatic caspase-9 in 12-week-old mice. Caspase-9 quantitation & representative IF microphotographs of Atg7Δpan (n=5) & Atg7Δpan-Rip3d/d (n=5) pancreatic tissue stained for DAPI (blue) & Caspase-9 (red) (anti-caspase-9 NB100-56118, 1/1000). (d) Reduced infiltration inflammation of macrophages (F4/80, NBP2-12506, 1/75) & early T-lymphocytes (MPO, ab9535, 1/50) in double-deficient Atg7Δpan-Rip3d/d (n=10) mice compared with pancreatic Atg7Δpan (n=7). Data are mean±S.E.M. for the numbers of animals as indicated in the graph, *P<0.05, **P<0.01, NS = no significance Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/28703808), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Zhou X, Xie L, Bergmann F et al. The bile acid receptor FXR attenuates acinar cell autophagy in chronic pancreatitis. Cell Death Discov. 2017-06-29 [PMID: 28660075]

Yan Huo, Abudureheman Mijiti, Ruonan Cai, Zhaohua Gao, Maierpu Aini, Abudukadier Mijiti, Zhaoling Wang, Rui Qie Scutellarin alleviates type 2 diabetes (HFD/low dose STZ)-induced cardiac injury through modulation of oxidative stress, inflammation, apoptosis and fibrosis in mice. Human & experimental toxicology 2022-03-07 [PMID: 34610774]

Jaworski S, Strojny B, Sawosz E et al. Degradation of Mitochondria and Oxidative Stress as the Main Mechanism of Toxicity of Pristine Graphene on U87 Glioblastoma Cells and Tumors and HS-5 Cells Int J Mol Sci 2019-02-02 [PMID: 30717385]

Espinosa-Jeffrey A, Arrazola RA, Chu B et al. Trophic factors intervention regenerates the nestin-expressing cell population in a model of perinatal excitotoxicity: Implications for perinatal brain injury and prematurity Integrative Molecular Medicine 2016-06-25 [PMID: 35558521] (Immunohistochemistry-Frozen, Immunocytochemistry/ Immunofluorescence, Immunocytochemistry/ Immunofluorescence)

Doke T, Huang S, Qiu C et al. Genome-wide association studies identify the role of caspase-9 in kidney disease Science Advances 2021-11-05 [PMID: 34739325] (Immunocytochemistry/ Immunofluorescence)

Srivastava S, Gajwani P, Jousma J et al. Nuclear translocation of mitochondrial dehydrogenases as an adaptive cardioprotective mechanism Nature communications 2023-07-19 [PMID: 37468519] (WB, Human)

Details:
Dilutions: 1:1000

Feng Y, Yang L, Ma X et al. Photobiomodulation treatment inhibits neurotoxic astrocytic polarization and protects neurons in in vitro and in vivo stroke models Neurochemistry international 2022-12-17 [PMID: 36539162] (IHC-Fr, Mouse)

Li J, Camirand A, Zakikhani M et al. Parathyroid hormone related protein inhibition blocks triple negative breast cancer expansion in bone through epithelial to mesenchymal transition reversal JBMR Plus 2022-06-20 [PMID: 35720668]

Eskiler GG, Turna O, Ozkan AD et al. The response of the canine mammary simple carcinoma and carcinosarcoma cells to 5-aminolaevulinic acid-based photodynamic therapy: An in vitro study Journal of photochemistry and photobiology. B, Biology 2022-07-05 [PMID: 35810598] (WB, Canine)

Gao K, Niu J, Dang X Wnt-3a improves functional recovery through autophagy activation via inhibiting the mTOR signaling pathway after spinal cord injury Neurosci. Lett. 2020-08-17 [PMID: 32818590] (WB, Rat)

Xie L, Xia L, Klaiber U et al. Effects of neoadjuvant FOLFIRONOX and gemcitabine-based chemotherapy on cancer cell survival and death in patients with pancreatic ductal adenocarcinoma Oncotarget 2019-12-31 [PMID: 31921387] (ICC/IF, Human)

Zhou X, Xie L, Xia L et al. RIP3 attenuates the pancreatic damage induced by deletion of ATG7 Cell Death and Disease 2017-07-13 [PMID: 28703808] (ICC/IF, Mouse)

More publications at http://www.novusbio.com/NB100-56118

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NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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