

Product Datasheet

Caspase-8 Antibody NB100-56116

Unit Size: 0.05 ml

Store at -20C. Avoid freeze-thaw cycles.

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Updated 10/23/2024 v.20.1

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NB100-56116**Caspase-8 Antibody****Product Information**

Unit Size	0.05 ml
Concentration	This product is unpurified. The exact concentration of antibody is not quantifiable.
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide
Isotype	IgG
Purity	Unpurified
Buffer	Whole antisera
Target Molecular Weight	55.4 kDa

Product Description

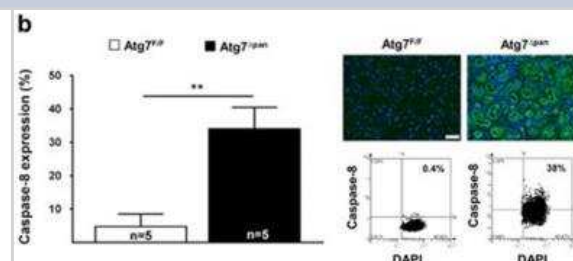
Host	Rabbit
Gene ID	841
Gene Symbol	CASP8
Species	Human, Mouse, Rat, Gerbil
Reactivity Notes	Possible reactivity with canine species.
Specificity/Sensitivity	Detects Caspase-8 and cleavage products.
Immunogen	Recombinant catalytically active human Caspase-8 protein.

Product Application Details

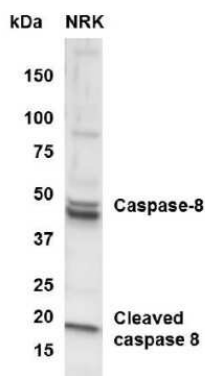
Applications	Western Blot, Simple Western, Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Immunoprecipitation
Recommended Dilutions	Western Blot 1:1000-1:2000, Simple Western reported by internal validation, Flow Cytometry, Immunohistochemistry 1:10-1:500, Immunocytochemistry/Immunofluorescence 1:10-1:500, Immunoprecipitation 1:50-1:200, Immunohistochemistry-Paraffin 1:1000-1:5000, Immunohistochemistry-Frozen 1:10-1:500
Application Notes	In Simple Western internal validation: Cell lysates as sample type; separated by size; antibody dilution of 1:500; matrix was 12-230 kDa; detected by Chemiluminescence.

Images

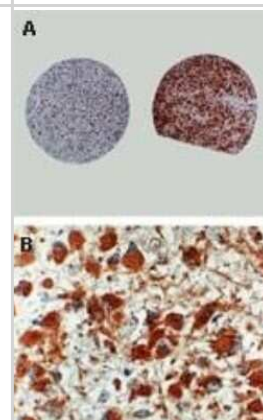
Immunohistochemistry: Caspase-8 Antibody - (active/cleaved) [NB100-56116] - Autophagy-deficient mice showed increased activity of apoptosis and necroptosis. Reduced pancreatic Atg7 level increased the expression of Caspase-8 in 12-week-old Atg7^{deltapan} mice. Caspase-8 quantitation and representative IF microphotographs of Atg7^{F/F} (n=5) and Atg7^{deltapan} (n=5) pancreatic tissue stained for DAPI (blue) and Caspase-8 (green) (1/1000, scale bar=50 μ m). Image collected and cropped by CiteAb from the following publication (<https://www.nature.com/doi/10.1038/cddis.2017.313>), licensed under a CC-BY license.



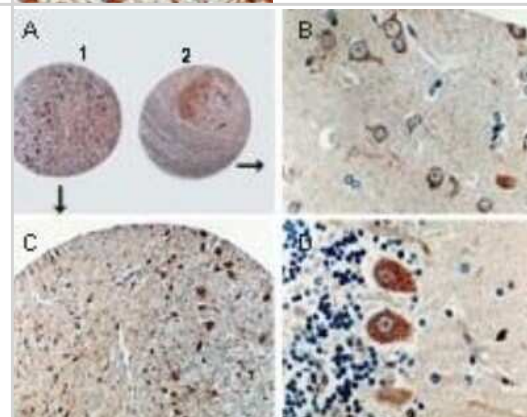
Western Blot: Caspase-8 Antibody - (active/cleaved) [NB100-56116] - Analysis of active/cleaved Caspase 8 in NRK whole cell lysate using anti-active/cleaved Caspase 8 antibody. WB image submitted by a verified customer review.



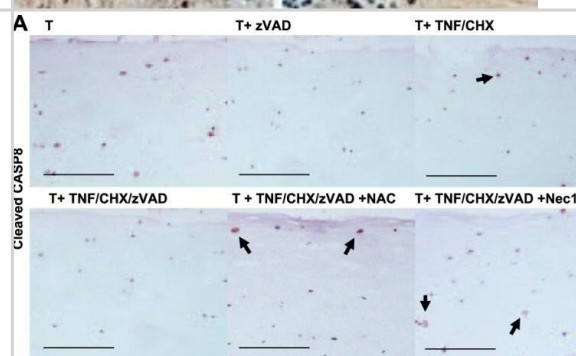
Immunohistochemistry-Paraffin: Caspase-8 Antibody - (active/cleaved) [NB100-56116] - Sections from a brain tumor tissue array stained for Caspase-8 expression using NB100-56116 at 1:2000. A. Anaplastic glioma (Grade III, left) and Gemistocytoma (Grade II, right) cores showing negative and positive staining for Caspase-8, respectively. B. Higher magnification of the Gemistocytoma tumor (from A).



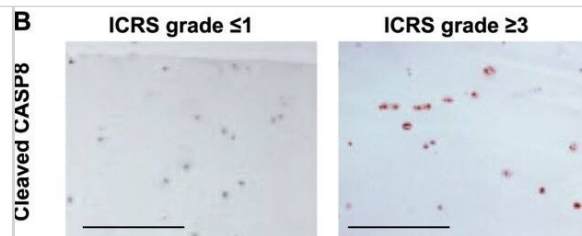
Immunohistochemistry-Paraffin: Caspase-8 Antibody - (active/cleaved) [NB100-56116] - Sections from a brain tissue array stained for Caspase-8 expression using NB100-56116 at 1:2000. A. Normal brain stem (1) and cortex (2). B. Higher magnification of cortex (from A). C. Higher magnification of brain stem (from A). D. Normal cerebellum showing caspase-8 staining in the Purkinje cells.



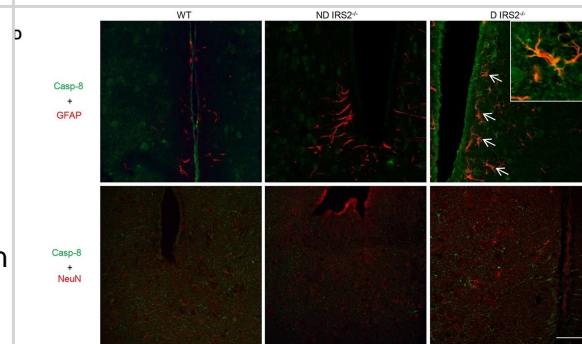
Immunohistochemistry: Caspase-8 Antibody [NB100-56116] - Necroptosis marker p-MLKL can be detected in OA cartilage & after TNF/CHX stimulation. Exemplary images of impacted & differently stimulated cartilage explants after immunohistochemical staining of a cleaved CASP8, b RIPK3, & c p-MLKL. In addition, percentage of cleaved CASP8- (d) & p-MLKL- (e) positive cells was quantified (n = 3). Images were acquired using a 20× objective; the bars represent 200 μm. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/31527653>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Immunohistochemistry: Caspase-8 Antibody [NB100-56116] - Expression of necroptosis- & apoptosis-related markers is elevated in OA cartilage. Necroptosis- & apoptosis-related markers in highly degenerated cartilage tissue of OA patients (ICRS grade ≥ 3) were determined by a gene expression analysis of apoptosis & necroptosis markers as well as immunohistochemical analysis (IHC) of b cleaved CASP8, c RIPK3, & d p-MLKL. Macroscopically intact cartilage (ICRS grade ≤ 1) served as control. Bars in the IHC images represent 200 μm . Statistical analysis was performed by an unpaired multiple t test; error bars indicate median & range from min to max; $n = 13$. Significant differences between groups were depicted as: * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$, **** $P < 0.0001$. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/31527653>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Immunocytochemistry/ Immunofluorescence: Caspase-8 Antibody [NB100-56116] - Analysis of the cell type susceptible to apoptotic cell death in the hypothalamus of IRS2^{-/-} mice. Immunoblots probed with antibodies against GFAP (A) & Tuj-1 (B) in the hypothalamus of wild-type (WT), non-diabetic IRS2-deficient (ND IRS2^{-/-}) & diabetic IRS2-deficient (D IRS2^{-/-}) mice. The average of three independent assays performed in duplicate is shown. Statistical significance by ANOVA: * $P < 0.05$ vs WT mice. $n=6/\text{group}$. (C) Colocalization of TUNEL & GFAP in the hypothalamus of WT, ND IRS2^{-/-} & D IRS2^{-/-} mice. Arrows indicate astrocytes with apoptotic nuclei. (D) Colocalization of cleaved caspase-8 & GFAP, & of cleaved caspase-8 & NeuN, in the hypothalamus of WT, ND IRS2^{-/-} & D IRS2^{-/-} mice. Arrows indicate colocalization of GFAP & cleaved caspase-8. Scale bar: 50 μm ; inset, 100 μm . Image collected & cropped by CiteAb from the following publication (<https://journals.biologists.com/dmm/article/doi/10.1242/dmm.023515/257174/Increased-oxidative-stress-and-apoptosis-in-the>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Boege Yannick, Malehmir Mohsen, Healy Marc E et al. A Dual Role of Caspase-8 in Triggering and Sensing ProlifeRation-Associated DNA Damage, a Key Determinant of Liver Cancer Development. *Cancer Cell* 2017-01-01 [PMID: 28898696]

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]

Ga-Eun Lee, Geul Bang, Jiin Byun, Cheol-Jung Lee, Weidong Chen, Dohyun Jeung, Hyun-Jung An, Han Chang Kang, Joo Young Lee, Hye Suk Lee, Young-Soo Hong, Dae Joon Kim, Megan Keniry, Jin Young Kim, Jin-Sung Choi, Manolis Fanto, Sung-Jun Cho, Kwang-Dong Kim, Yong-Yeon Cho Dysregulated CREB3 cleavage at the nuclear membrane induces karyoptosis-mediated cell death *Experimental & Molecular Medicine* 2024-03-13 [PMID: 38480902]

Rochelle Fletcher, Jingshan Tong, Denise Risnik, Brian Leibowitz, Yi-Jun Wang, Fernando Concha-Benavente, Jonathan M. DeLiberty, Donna B. Stolz, Reet K. Pai, Robert L. Ferris, Robert E. Schoen, Jian Yu, Lin Zhang Non-steroidal anti-inflammatory drugs induce immunogenic cell death in suppressing colorectal tumorigenesis *Oncogene* 2021-02-05 [PMID: 33603166]

Martin KK, Parvin S, Garraway SM. Peripheral inflammation accelerates the onset of mechanical hypersensitivity after spinal cord injury and engages TNFa signaling mechanisms *J. Neurotrauma* 2018-12-06 [PMID: 30520675]

Kathryn A. F. Pennel, Phimmada Hatthakarnkul, Colin S. Wood, Guang-Yu Lian, Sara S. F. Al-Badran, Jean A. Quinn, Assya Legrini, Jitwadee Inthagard, Peter G. Alexander, Hester van Wyk, Ahmad Kurniawan, Umar Hashmi, Michael A. Gillespie, Megan Mills, Aula Ammar, Jennifer Hay, Ditte Andersen, Colin Nixon, Selma Rebus, David K. Chang, Caroline Kelly, Andrea Harkin, Janet Graham, David Church, Ian Tomlinson, Mark Saunders, Tim Iveson, Tamsin R. M. Lannagan, Rene Jackstadt, Noori Maka, Paul G. Horgan, Campbell S. D. Roxburgh, Owen J. Sansom, Donald C. McMillan, Colin W. Steele, Nigel B. Jamieson, James H. Park, Antonia K. Roseweir, Joanne Edwards JAK/STAT3 represents a therapeutic target for colorectal cancer patients with stromal-rich tumors *Journal of Experimental & Clinical Cancer Research : CR* 2024-03-01 [PMID: 38424636]

Y Jin, Y Liu, L Xu, J Xu, Y Xiong, Y Peng, K Ding, S Zheng, N Yang, Z Zhang, L Li, L Tan, H Song, J Fu Novel role for caspase 1 inhibitor VX765 in suppressing NLRP3 inflammasome assembly and atherosclerosis via promoting mitophagy and efferocytosis *Cell Death & Disease*, 2022-05-31;13(5):512. 2022-05-31 [PMID: 35641492]

Wang S, Chang CW, Huang J et al. Gasdermin C sensitizes tumor cells to PARP inhibitor therapy in cancer models *The Journal of clinical investigation* 2023-10-26 [PMID: 37883181] (WB, Human)

Luk CT, Chan CK, Chiu F et al. Dual role of caspase 8 in adipocyte apoptosis and metabolic inflammation *Diabetes* 2023-09-12 [PMID: 37699387]

Montecillo-Aguado M, Tirado-Rodriguez B, Antonio-Andres G et al. Omega-6 Polyunsaturated Fatty Acids Enhance Tumor Aggressiveness in Experimental Lung Cancer Model: Important Role of Oxylipins *International Journal of Molecular Sciences* 2022-05-31 [PMID: 35682855] (Immunohistochemistry)

Zhang L, Zhu D, Jiang J et al. The ubiquitin E3 ligase MDM2 induces chemoresistance in colorectal cancer by degradation of ING3 *Carcinogenesis* 2023-06-06 [PMID: 37279970]

Subramanya S, Fernando R, Goswami M et al. Flow cytometric method for the detection and quantification of retinal cell death and oxidative stress *Experimental eye research* 2023-06-29 [PMID: 37393050] (FLOW, Mouse)

More publications at <http://www.novusbio.com/NB100-56116>





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