

Product Datasheet

Caspase-3 Antibody (CPP32 4-1-18) - BSA Free NB500-210

Unit Size: 0.2 ml

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

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Reviews: 3 **Publications: 24**

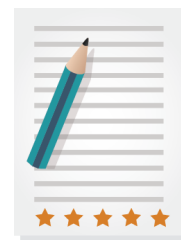
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NB500-210

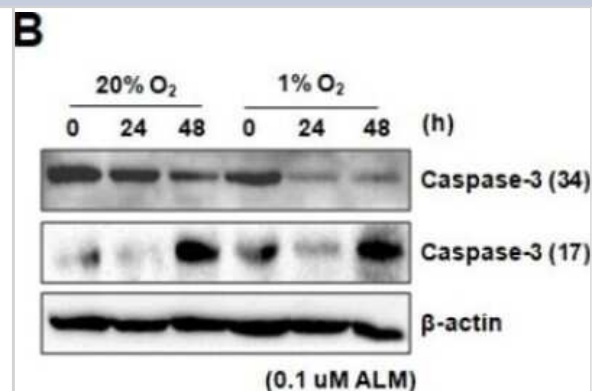
Caspase-3 Antibody (CPP32 4-1-18) - BSA Free

Product Information	
Unit Size	0.2 ml
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	CPP32 4-1-18
Preservative	0.02% Sodium Azide
Isotype	IgG2a Kappa
Purity	Protein G purified
Buffer	PBS
Target Molecular Weight	31.7 kDa
Product Description	
Host	Mouse
Gene ID	836
Gene Symbol	CASP3
Species	Human, Mouse, Rat
Immunogen	This Caspase-3 Antibody (CPP32 4-1-18) was developed against full-length recombinant human Caspase 3 [UniProt# P42574].
Product Application Details	
Applications	Western Blot, Simple Western, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Immunoprecipitation
Recommended Dilutions	Western Blot 1:500-1:1000, Simple Western 1:2000, Immunohistochemistry 1:200-1:500, Immunocytochemistry/ Immunofluorescence 2 ug/ml, Immunoprecipitation 2 ug / mg lysate, Immunohistochemistry-Paraffin 1:10-1:500, Immunohistochemistry-Frozen reported in scientific literature (PMID 31242448)
Application Notes	<p>A band is seen at ~32 kDa for the inactive form of Caspase 3 and ~17-22 kDa for the active form of Caspase 3 in Western Blot. (See protocol for additional information).</p> <p>In Simple Western only 10 - 15 uL of the recommended dilution is used per data point. Separated by Size-Wes, Sally Sue/Peggy Sue.</p>

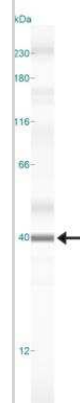


Images

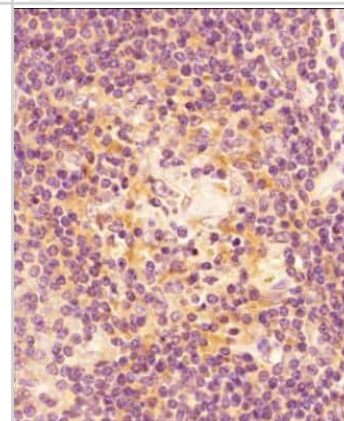
Western Blot: Caspase-3 Antibody (CPP32 4-1-18) [NB500-210] - ALM induces HIF-1 α -dependent apoptosis in PC3 cells. PC3 cells were treated with ALM for 24 h and 48 h at 0.1 μ M under normoxia and hypoxia, followed by Western blot for caspase-3. Image collected and cropped by CiteAb from the following publication (<https://www.mdpi.com/2073-4409/8/5/439>), licensed under a CC-BY license.



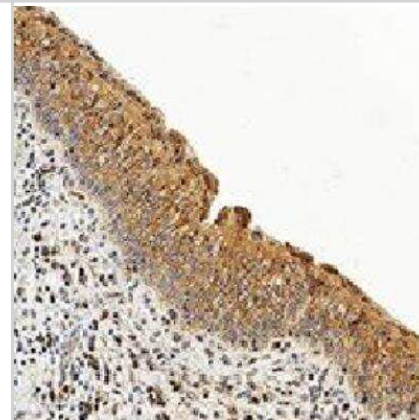
Simple Western: Caspase-3 Antibody (CPP32 4-1-18) [NB500-210] - Lane view shows a specific band for Caspase 3 in 0.5 mg/ml of Hek293 lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.



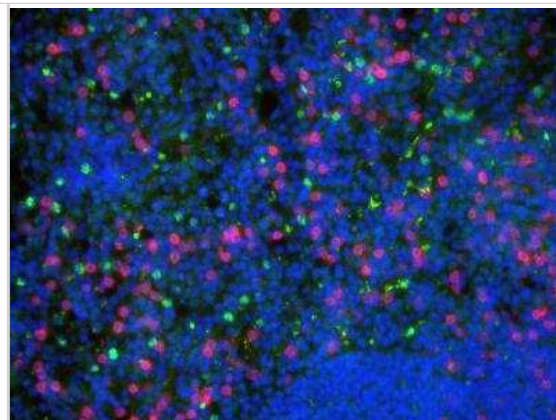
Immunohistochemistry-Paraffin: Caspase-3 Antibody (CPP32 4-1-18) [NB500-210] - Analysis of a FFPE human spleen section using 1:200 dilution of . The staining was developed using HRP conjugated anti-mouse secondary antibody and DAB reagent. This Caspase 3 antibody generated a specific staining in the cytoplasm of various splenocytes.



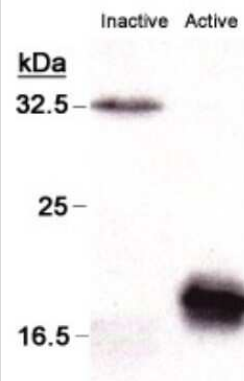
Immunohistochemistry-Paraffin: Caspase-3 Antibody (CPP32 4-1-18) [NB500-210] - Caspase-3 was detected in immersion fixed paraffin-embedded sections of human bladder 1:300 dilution of mouse monoclonal Caspase-3 Antibody (CPP32 4-1-18) (NB500-210, Novus Biologicals), for 1 hour at room temperature followed by anti-mouse IgG VisUCyte HRP polymer(VC001). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue).



Immunohistochemistry-Frozen: Caspase-3 Antibody (CPP32 4-1-18) - BSA Free [NB500-210] - Analysis of murine spleen with Caspase-3 (green), CD3 (red) and DAPI (blue). Image from verified customer review.



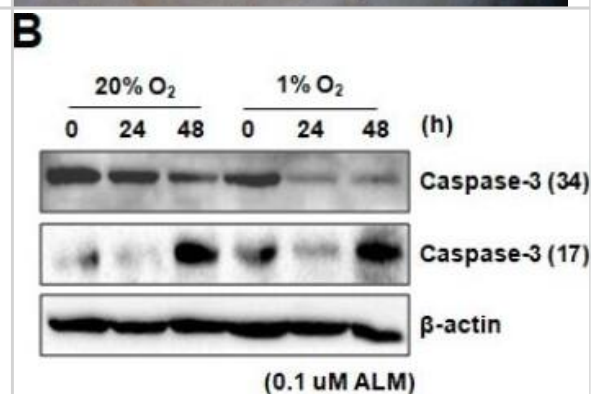
Western Blot: Caspase-3 Antibody (CPP32 4-1-18) [NB500-210] - Detection of Caspase (19 and 35 kDa) from HEK293 cell extract using (NB500-210). Lanes 1 and 2 contain inactive and active Caspase, respectively.



Immunohistochemistry-Paraffin: Caspase-3 Antibody (CPP32 4-1-18) [NB500-210] - Rat epithelial cells of the tongue base. Antigen retrieval method: Citrate buffer.



ALM induces HIF-1alpha-dependent apoptosis in PC3 cells. (B) PC3 cells were treated with ALM for 24 h and 48 h at 0.1 uM under normoxia and hypoxia, followed by Western blot for caspase-3. Image collected and cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/31083403>), licensed under a CC-BY licence.



Publications

Liu Z, Wang M, Huang R et al. Novel Indole-Chalcone Derivative-Ligated Platinum(IV) Prodrugs Attenuate Cisplatin Resistance in Lung Cancer through ROS/ER Stress and Mitochondrial Dysfunction *Journal of medicinal chemistry* 2023-03-22 [PMID: 36946996]

Basavaraj P, Hsieh PF, Jiang WP et al. Elucidation of scandenolone as anti-cancer activity through impairment of the metabolic and signaling vulnerabilities in prostate cancer *Biomedicine & pharmacotherapy = Biomedecine & pharmacotherapie* 2023-05-29 [PMID: 37257224] (WB, Human)

Hsieh P, Jiang W, Basavaraj P Et al. Cell suspension culture extract of *Eriobotrya japonica* attenuates growth and induces apoptosis in prostate cancer cells via targeting SREBP-1/FASN-driven metabolism and AR *Phytomedicine* 2021-12-01 [PMID: 34740154] (WB, Human)

Su C Sann-Joong-Kuey-Jian-Tang decreases the protein expression of mammalian target of rapamycin but increases microtubule associated protein II light chain 3 expression to inhibit human BxPC 3 pancreatic carcinoma cells. *Mol Med Rep* 2015-01-04 [PMID: 25516264] (WB, Human)

Cheng Jiadong, Hu Lan, Yang Zheng et al. 2-Oxonanonoidal Antibiotic Actinolactomycin Inhibits Cancer Progression by Suppressing HIF-1 alpha. *Cells* 2019-05-10 [PMID: 31083403] (WB, Human)

Rutledge EA, Parvez RK, Short KM et al. Morphogenesis of the kidney and lung requires branch-tip directed activity of the Adamts18 metalloprotease *Dev. Biol.* 2019-06-23 [PMID: 31242448] (IHC-F, Mouse)

Martins FF, Aguila MB, Mandarim-de-Lacerda CA. Impaired steroidogenesis in the testis of leptin-deficient mice (ob/ob -/-). *Acta Histochem.* 2017-05-13 [PMID: 28506466]

Graus-Nunes F, Marinho TS, Barbosa-da-Silva S et al. Differential effects of angiotensin receptor blockers on pancreatic islet remodelling and glucose homeostasis in diet-induced obese mice. *Mol. Cell. Endocrinol.* 2016-10-22 [PMID: 27780713] (IF/IHC, Mouse)

Kim H, Lee KH, Park IA et al. Expression of SIRT1 and apoptosis-related proteins is predictive for lymph node metastasis and disease-free survival in luminal A breast cancer. *Virchows Arch.* 2015-08-18 [PMID: 26280894] (IHC-P, Human)

Details:

Caspase 3 antibody was used at 1:300 dilution for IHC-P analysis of tissue sections from human cases of luminal A invasive breast ductal carcinoma. The assay was performed on benchmark automatic immunostaining device and the signal detection was performed using biotinylated anti-mouse secondary antibody -peroxidase-labeled streptavidin - DAB method.

Shibayama Y, Kondo T, Ohya H et al. Upregulation of microRNA-126-5p is associated with drug resistance to cytarabine and poor prognosis in AML patients. *Oncol Rep* 2015-05-01 [PMID: 25759982]

Chen YL, Yan MY, Chien SY et al. Sann-Joong-Kuey-Jian-Tang inhibits hepatocellular carcinoma Hep-G2 cell proliferation by increasing TNF-alpha, Caspase-8, Caspase- 3 and Bax but by decreasing TCTP and Mcl-1 expression in vitro. *Mol Med Rep* 2013-05-01 [PMID: 23525225] (Human)

Wu SH, Chyau CC, Chen JH et al. Anti-cancerous effects of *Wasabia japonica* extract in Hep3B liver cancer cells via ROS accumulation, DNA damage and p73-mediated apoptosis *Journal of Functional Foods* 2015-03-02 (WB, Human)

More publications at <http://www.novusbio.com/NB500-210>

Procedures

Western Blot Protocol for Caspase 3 Antibody (NB500-210)

Procedure Guide for NB 500-210 Monoclonal anti-Caspase 3

Western Protocol

- 1) Run a 10-15% SDS polyacrylamide gel, loading ~20 ug of cell extract per lane.
- 2) Transfer the proteins to a membrane.
- 3) Block the membrane in PT-T20 [20 mM Tris-HCl, pH 7.4 / 150 mM NaCl/0.5% Tween 20] + 5% NFDM [non-fat dry milk], for 3 hour at room temperature (RT), shaking gently.
- 4) Rinse the membrane twice with PT-T20.
- 5) Incubate the membrane in anti-Caspase 3 [NB 500-210], diluted 1:500-1:1,000 in PT-T20 + 5% NFDM, for 60 minutes at RT.
- 6) Wash the membrane for 15 minutes, 3 times, in PT-T20 at RT.
- 7) Incubate the membrane in anti-mouse conjugated to HRP (secondary antibody), diluted in PT-T20 + 5% NFDM for 60 minutes at RT.
- 8) Wash the membrane for 15 minutes, 3 times, in PT-T20 at RT.
- 9) Develop membrane in chemiluminescent reagents, as instructed by kit-vendor.

*Positive control(s): Human kidney 293 cells

To Activate the Cell Extracts:

Bring the extract to a final concentration of 5 mM dATP.

Incubate the extracts at 37C for 15-30 minutes.





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Products Related to NB500-210

NB800-PC6	293 Whole Cell Lysate
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-96981-0.5mg	Mouse IgG2a Kappa Isotype Control (M2AK)

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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