

# 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.

[www.novusbio.com](http://www.novusbio.com)



[technical@novusbio.com](mailto:technical@novusbio.com)

**Reviews: 3** **Publications: 24**

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:  
[www.novusbio.com/NB500-210](http://www.novusbio.com/NB500-210)

Updated 2/17/2025 v.20.1

**Earn rewards for product  
reviews and publications.**

Submit a publication at [www.novusbio.com/publications](http://www.novusbio.com/publications)

Submit a review at [www.novusbio.com/reviews/destination/NB500-210](http://www.novusbio.com/reviews/destination/NB500-210)



**NB500-210**

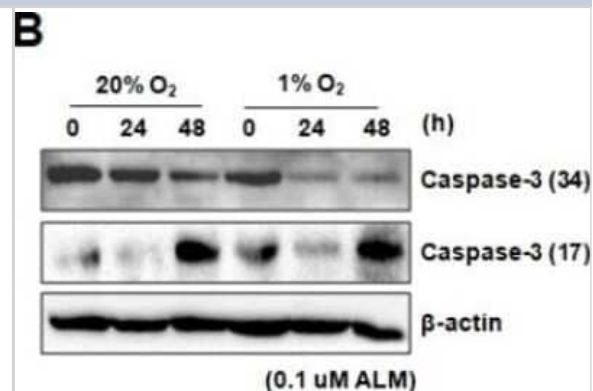
Caspase-3 Antibody (CPP32 4-1-18) - BSA Free

<b>Product Information</b>	
<b>Unit Size</b>	0.2 ml
<b>Concentration</b>	1.0 mg/ml
<b>Storage</b>	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
<b>Clonality</b>	Monoclonal
<b>Clone</b>	CPP32 4-1-18
<b>Preservative</b>	0.02% Sodium Azide
<b>Isotype</b>	IgG2a Kappa
<b>Purity</b>	Protein G purified
<b>Buffer</b>	PBS
<b>Target Molecular Weight</b>	31.7 kDa
<b>Product Description</b>	
<b>Host</b>	Mouse
<b>Gene ID</b>	836
<b>Gene Symbol</b>	CASP3
<b>Species</b>	Human, Mouse, Rat
<b>Immunogen</b>	This Caspase-3 Antibody (CPP32 4-1-18) was developed against full-length recombinant human Caspase 3 [UniProt# P42574].
<b>Product Application Details</b>	
<b>Applications</b>	Western Blot, Simple Western, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Immunoprecipitation
<b>Recommended Dilutions</b>	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)
<b>Application Notes</b>	<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.</p> <p>See <a href="#">Simple Western Antibody Database</a> for Simple Western validation: Tested in Hek293 lysate 0.5 mg/mL, separated by Size, antibody dilution of 1:2000, apparent MW was 40 kDa. Separated by Size-Wes, Sally Sue/Peggy Sue.</p>

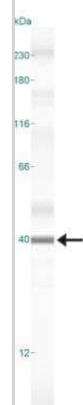


## Images

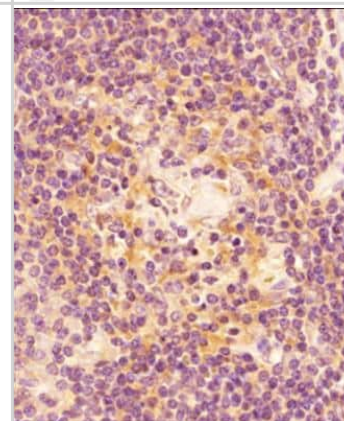
Western Blot: Caspase-3 Antibody (CPP32 4-1-18) [NB500-210] - ALM induces HIF-1 $\alpha$ -dependent apoptosis in PC3 cells. PC3 cells were treated with ALM for 24 h and 48 h at 0.1  $\mu$ M under normoxia and hypoxia, followed by Western blot for caspase-3. Image collected and cropped by CiteAb from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



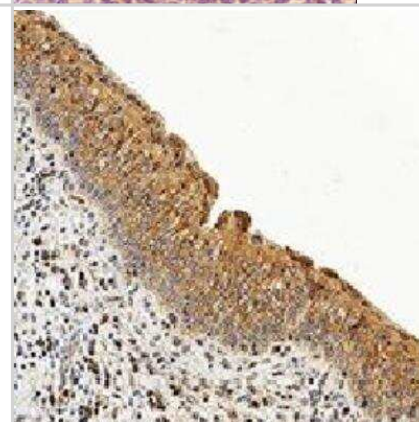
Simple Western: Caspase-3 Antibody (CPP32 4-1-18) [NB500-210] - Lane view shows a specific band for Caspase 3 in 0.5 mg/ml of Hek293 lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.



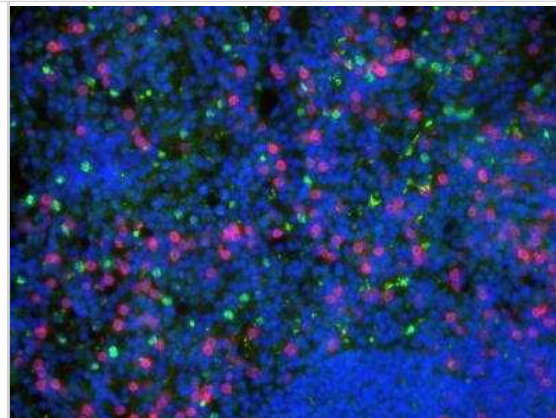
Immunohistochemistry-Paraffin: Caspase-3 Antibody (CPP32 4-1-18) [NB500-210] - Analysis of a FFPE human spleen section using 1:200 dilution of . The staining was developed using HRP conjugated anti-mouse secondary antibody and DAB reagent. This Caspase 3 antibody generated a specific staining in the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



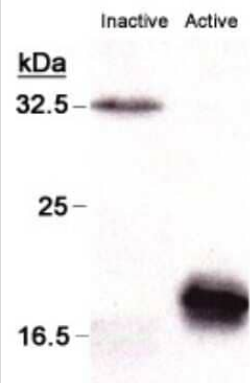
Immunohistochemistry-Paraffin: Caspase-3 Antibody (CPP32 4-1-18) [NB500-210] - Caspase-3 was detected in immersion fixed paraffin-embedded sections of human bladder 1:300 dilution of mouse monoclonal Caspase-3 Antibody (CPP32 4-1-18) (NB500-210, Novus Biologicals), for 1 hour at room temperature followed 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.



## 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.







### **Novus Biologicals USA**

10730 E. Briarwood Avenue  
Centennial, CO 80112  
USA  
Phone: 303.730.1950  
Toll Free: 1.888.506.6887  
Fax: 303.730.1966  
nb-customerservice@bio-techne.com

### **Bio-Techne Canada**

21 Canmotor Ave  
Toronto, ON M8Z 4E6  
Canada  
Phone: 905.827.6400  
Toll Free: 855.668.8722  
Fax: 905.827.6402  
canada.inquires@bio-techne.com

### **Bio-Techne Ltd**

19 Barton Lane  
Abingdon Science Park  
Abingdon, OX14 3NB, United Kingdom  
Phone: (44) (0) 1235 529449  
Free Phone: 0800 37 34 15  
Fax: (44) (0) 1235 533420  
info.EMEA@bio-techne.com

### **General Contact Information**

www.novusbio.com  
Technical Support: nb-technical@bio-techne.com  
Orders: nb-customerservice@bio-techne.com  
General: novus@novusbio.com

### **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.

For more information on our 100% guarantee, please visit [www.novusbio.com/guarantee](http://www.novusbio.com/guarantee)

Earn gift cards/discounts by submitting a review: [www.novusbio.com/reviews/submit/NB500-210](http://www.novusbio.com/reviews/submit/NB500-210)

Earn gift cards/discounts by submitting a publication using this product:  
[www.novusbio.com/publications](http://www.novusbio.com/publications)

