

# Product Datasheet

## Caspase-3 Antibody (CPP32 4-1-18) NB500-210SS

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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**NB500-210SS****Caspase-3 Antibody (CPP32 4-1-18)**

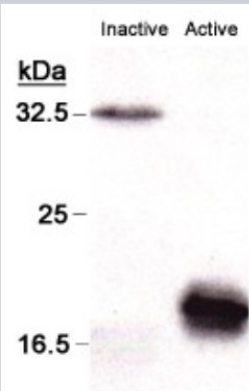
Product Information	
Unit Size	0.05 ml
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	CPP32 4-1-18
Preservative	0.02% Sodium Azide
Isotype	IgG2a Kappa
Purity	Protein G purified
Buffer	PBS

Product Description	
Host	Mouse
Gene ID	836
Gene Symbol	CASP3
Species	Human, Mouse, Rat
Reactivity Notes	Human, mouse and rat.
Immunogen	Full-length recombinant human Caspase 3 [UniProt# P42574]

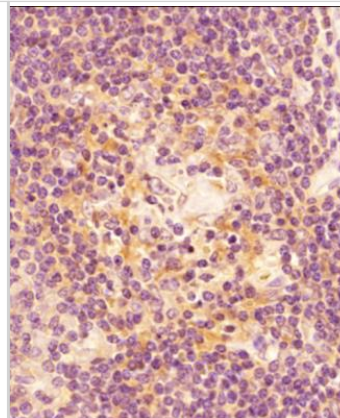
Product Application Details	
Applications	Western Blot, Simple Western, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 1:500-1:1000, Simple Western 1:2000, Immunohistochemistry 1:200-1:500, Immunohistochemistry-Paraffin 1:200-1:500
Application Notes	<p>This Caspase 3 (CPP32 4-1-18) antibody is useful for Immunohistochemistry on paraffin-embedded sections and Western Blot, where 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. (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**

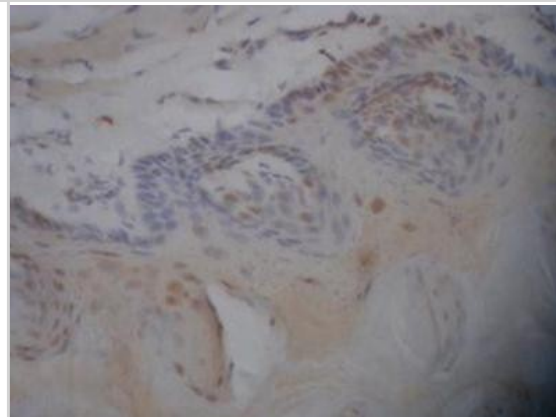
Western Blot: Caspase-3 Antibody (CPP32 4-1-18) [NB500-210] - Western blot detection of Caspase (19 and 35 kDa) from HEK293 cell extract using NB500-210. Lanes 1 and 2 contain inactive and active Caspase, respectively.



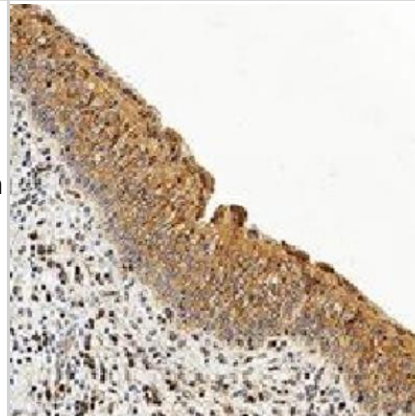
Immunohistochemistry-Paraffin: Caspase-3 Antibody (CPP32 4-1-18) [NB500-210] - IHC analysis of a formalin fixed and paraffin embedded human spleen section using 1:200 dilution of Caspase-3 antibody (clone CPP32 4-1-18). The staining was developed using HRP conjugated anti-mouse secondary antibody and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



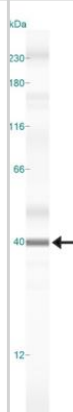
Immunohistochemistry-Paraffin: Caspase-3 Antibody (CPP32 4-1-18) [NB500-210] - Rat epithelial cells of the tongue base. Antigen retrieval method: Citrate buffer.



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 anti-Caspase-3 monoclonal (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).



Simple Western: Caspase-3 Antibody (CPP32 4-1-18) [NB500-210] - Simple Western 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.



## Publications

Martins FF, Aguila MB, Mandarim-de-Lacerda CA. Impaired steroidogenesis in the testis of leptin-deficient mice (ob/ob -/-). *Acta Histochem.* May 13 2017 12:00AM [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.* Oct 22 2016 12:00AM [PMID: 27780713] (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 Aug 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 May [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 May [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 Mar 02 (WB, Human)

Hsuan SW, Chyau CC, Hung HY et al. The induction of apoptosis and autophagy by Wasabia japonica extract in colon cancer *Eur J Nutr* 2015 Feb 27 [PMID: 25720497] (WB, Human)

Hu H, Takano N, Xiang L et al. Hypoxia-inducible factors enhance glutamate signaling in cancer cells. *Oncotarget* 2014 Oct 15 [PMID: 25326682] (WB, Human)

Chien SY, Kuo SJ, Chen DR, Su CC. Sann-Joong-Kuey-Jian-Tang decreases the protein expression of Mcl-1 and TCTP and increases that of TNF-alpha and Bax in BxPC-3 pancreatic carcinoma cells. *Int J Mol Med* 2013 Jul [PMID: 23652631]

Peng Z, Shuangzhu Y, Yongjie J et al. TNF receptor-associated factor 6 regulates proliferation, apoptosis, and invasion of glioma cells. *Mol Cell Biochem* 2013 Jan 29 [PMID: 23358926] (WB, Human)

Dash R, Azab B, Quinn B et al. Apogossypol derivative BI-97C1 (Sabutoclax) targeting Mcl-1 sensitizes prostate cancer cells to mda-7/IL-24-mediated toxicity *Proc Natl Acad Sci U S A* 2011 May 24 [PMID: 21555592] (WB, Human)

Fuzio P, Ditonno P, Rutigliano M et al. Regulation of TGF-B1 expression by Androgen Deprivation Therapy of prostate cancer *Cancer Letters* 2012 May 18 [PMID: 22269108] (IHC, 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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### **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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