

Product Datasheet

Caspase-3 (Pro and Active) Antibody NB100-56708SS

Unit Size: 0.025 mg

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

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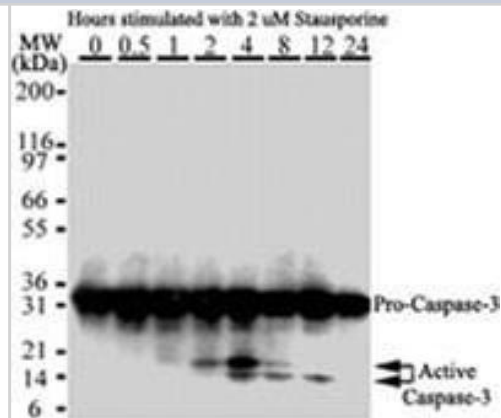
Updated 6/15/2014 v.20.1

NB100-56708SS**Caspase-3 (Pro and Active) Antibody (31A1067)**

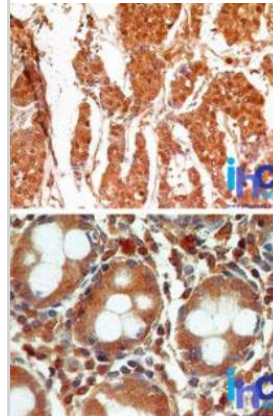
| Product Information | |
|------------------------------------|--|
| Unit Size | 0.025 mg |
| Concentration | 0.5 mg/ml |
| Storage | Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles. |
| Clonality | Monoclonal |
| Clone | 31A1067 |
| Preservative | 0.05% Sodium Azide |
| Isotype | IgG1 Kappa |
| Purity | Protein G purified |
| Buffer | PBS containing 0.05% BSA |
| Product Description | |
| Host | Mouse |
| Gene Symbol | CASP3 |
| Species | Human, Mouse, Rat |
| Species Reactivity | Cross reacts with Human, Mouse and Rat. |
| Specificity/Sensitivity | The antibody detects both pro Caspase-3 (~32 kDa) and the large subunit of the active/cleaved form (~14-21 kDa) of Caspase-3. The large subunit of the cleaved form may appear as one or two or even as a stack of bands depending on the presence or absence of the Caspase-3 pro-domain. |
| Immunogen | Full-length recombinant human caspase-3 protein was used as immunogen. The antibody recognizes an epitope in the large domain subunit of Caspase-3. As such it will recognize pro Caspase-3 and the large subunit cleavage fragment. |
| Product Application Details | |
| Applications | Western Blot, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin |
| Recommended Dilutions | Immunocytochemistry/Immunofluorescence, Immunohistochemistry 1:10-1:500, Immunohistochemistry-Frozen 1:10-1:500, Immunohistochemistry-Paraffin 1:10-1:500, Western Blot 1-5 ug/ml |
| Application Notes | Useful in Immunohistochemistry-Frozen See Zhang et al., and Immunohistochemistry-Paraffin See Lee et al. Use in Immunocytochemistry/Immunofluorescence was reported in the scientific literature (PMID: 23840553). |

Images

Western Blot: Caspase-3 (Pro and Active) Antibody (31A1067) [NB100-56708] - analysis of Caspase-3 in HeLa cells. Cells were treated with 2 μ M staurosporine for different time periods. Caspase-3 activation is detected in Western blots by the presence of cleavage fragments. The antibody detected both pro (full-length) and active (cleaved) protein, depending on the treatment time points. Pro Caspase-3 is detected at approximately 32 kDa. Active/cleaved Caspase-3 (large subunit) is detected at approximately 14-21 kDa as one or more bands.

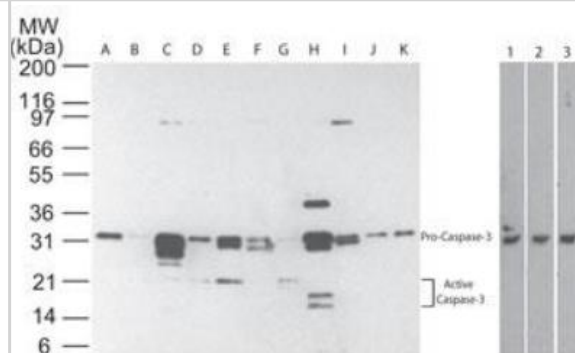


Immunohistochemistry-Paraffin: Caspase-3 (Pro and Active) Antibody (31A1067) [NB100-56708] - Formalin-fixed, paraffin-embedded human breast cancer (top) and normal colon (bottom) stained with Caspase-3 antibody at 4 μ g/ml. Localization can be cytoplasmic and nuclear. Staining in the nucleus is considered to be an indication of active Caspase-3. In most cell types and model systems, cells with active Caspase-3 are undergoing apoptosis. Cancer/normal adjacent tissue array was used for this test.



Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10 mM sodium citrate buffer, pH 6.0 for 10-20 min followed by cooling at RT for 20 min.

Western Blot: Caspase-3 (Pro and Active) Antibody (31A1067) [NB100-56708] - analysis of multiple human tissues (NBP2-30113 Instablot) using Caspase-3 antibody at 5 μ g/ml. The tissues shown are A) brain, B) heart, C) intestine, D) kidney, E) liver, F) lung, G) muscle, H) stomach, I) spleen, J) ovary, and K) testis.



Western Blot: Caspase-3 (Pro and Active) Antibody (31A1067) [NB100-56708] - Lanes 1, 2 and 3 demonstrate the species crossreactivity of the antibody in human, mouse and rat heart lysate, respectively.



Publications

Yi L, Zongyuan Y, Cheng G et al. Quercetin enhances apoptotic effect of tumor necrosis factor-related apoptosis-inducing ligand (TRAIL) in ovarian cancer cells through reactive oxygen species (ROS) mediated CCAAT enhancer-binding protein homologous protein (CHOP)-death receptor 5 pathway. *Cancer Sci.* 2014 Mar 10 [PMID: 24612139] (WB, Human)

Tsai AC, Wang CY, Liou JP et al. Orally active microtubule-targeting agent, MPT0B271, for the treatment of human non-small cell lung cancer, alone and in combination with erlotinib. *Cell Death Dis* 2014 Apr 11 [PMID: 24722287] (Human)

Chen YC, Chien LH, Huang BM, Chia YC. *Toona sinensis* (aqueous leaf extracts) induces apoptosis through the generation of ROS and activation of intrinsic apoptotic pathways in human renal carcinoma cells. *Journal of Functional Foods.* 2014 Feb 16 (WB, Human)

Mukherjee S, Chowdhury D, Kotcherlakota R et al. Potential Theranostics Application of Bio-Synthesized Silver Nanoparticles (4-in-1 System). *Theranostics.* 2014 Feb 7 [PMID: 24505239] (WB, Mouse)

Zhao X, Liu X, Su L. Parthenolide induces apoptosis via TNFRSF10B and PMAIP1 pathways in human lung cancer cells. *J. Exp. Clin. Cancer Res.* 2014 Jan 13 [PMID: 24387758] (WB, Human)

Tsai AC, Pai HC, Wang CY et al. In vitro and in vivo anti-tumour effects of MPT0B014, a novel derivative aroylquinoline, and in combination with erlotinib in human non-small-cell lung cancer cells. *Br. J. Pharmacol.* 2014 Jan 1 [PMID: 24116948] (WB, Human)

Kant S, Kumar A, Singh SM. Tumor growth retardation and chemosensitizing action of fatty acid synthase inhibitor orlistat on T cell lymphoma: implication of reconstituted tumor microenvironment and multidrug resistance phenotype. *Biochim. Biophys. Acta.* 2014 Jan 1 [PMID: 24060750] (WB, Human)

Lin WC, Tsai HF, Liao HJ et al. *Helicobacter pylori* sensitizes TNF-related apoptosis-inducing ligand (TRAIL)-mediated apoptosis in human gastric epithelial cells through regulation of FLIP. *Cell Death Dis* 2014 Mar 07 [PMID: 24603337] (WB, Human)

Chen CH, Chen MC, Wang JC et al. Synergistic Interaction between the HDAC Inhibitor, MPT0E028, and Sorafenib in Liver Cancer Cells In Vitro and In Vivo. *Clin. Cancer Res.* 2014 Mar 01 [PMID: 24520095] (WB, Human)

Paul S, Kundu R. Antiproliferative activity of methanolic extracts from two green algae, *Enteromorpha intestinalis* and *Rizoclonium riparium* on HeLa cells. *Daru* 2013 Dec 19 [PMID: 24355313] (WB, Human)

Chiu CC, Haung JW, Chang FR et al. Golden berry-derived 4B-hydroxywithanolide E for selectively killing oral cancer cells by generating ROS, DNA damage, and apoptotic pathways. *PLoS One.* 2013 May 21 [PMID: 23705007]

Chiang PC, Kung FL, Huang DM et al. Induction of Fas clustering and apoptosis by coral prostanoid in human hormone-resistant prostate cancer cells. *Eur J Pharmacol.* 2006 Aug 7 [PMID: 16806159]

More publications at <http://www.novusbio.com/NB100-56708>



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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.

For more information on our guarantee, please visit www.novusbio.com/guarantee.

