# **Product Datasheet**

# Noxa Antibody (114C307.1) - Non-Recombinant Monoclonal NB600-1159

Unit Size: 0.1 mg

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

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## NB600-1159

Noxa Antibody (114C307.1) - Non-Recombinant Monoclonal

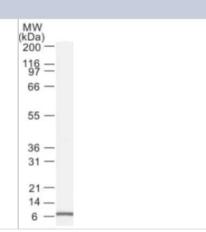
Product Information			
Unit Size	0.1 mg		
Concentration	1.0 mg/ml		
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.		
Clonality	Monoclonal		
Clone	114C307.1		
Preservative	0.05% Sodium Azide		
Isotype	IgG1 Kappa		
Purity	Protein G purified		
Buffer	PBS		
Target Molecular Weight	14.96 kDa		
Product Description			

<b>Product Description</b>	
Host	Mouse
Gene ID	5366
Gene Symbol	PMAIP1
Species	Human, Mouse, Rat
Reactivity Notes	Reactivity in rat is reported in scientific literature (Seda et al Hepatol Res. 2010, 40: 701-710). Rat reactivity reported in scientific literature (PMID:33031904).
Specificity/Sensitivity	An ~80 kD background band may also be seen in Jurkat cell lysate.
Immunogen	This Noxa antibody was developed by immunizing mice with a fusion protein containing human Noxa.

Product Application Details	
Applications	Western Blot, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 1-2 ug/ml, Flow Cytometry 1 ug / million cells, Immunohistochemistry 1:10-1:500, Immunocytochemistry/ Immunofluorescence 1:20-1:1000, Immunohistochemistry-Paraffin 5 ug/ml

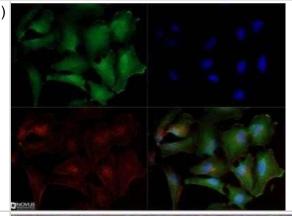
## **Images**

Western Blot: Noxa Antibody (114C307.1) - Non-Recombinant Monoclonal [NB600-1159] - Western blot analysis in RL-7 cells (a follicular lymphoma).

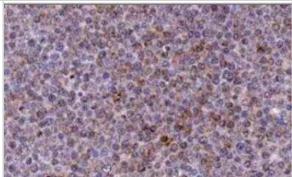




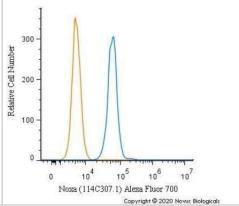
Immunocytochemistry/Immunofluorescence: Noxa Antibody (114C307.1) - Non-Recombinant Monoclonal [NB600-1159] - ICC/IF analysis using the azide-free version of NB600-1159 at 1:10. HeLa cells with DyLight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and DyLight 550 (red). Image objective 40X.



Immunohistochemistry-Paraffin: Noxa Antibody (114C307.1) - Non-Recombinant Monoclonal [NB600-1159] - Bouin-fixed, paraffinembedded Chronic Lymphocytic Leukemia (CLL) xenograft stained with Noxa antibody (1:2000), peroxidase-conjugate and DAB chromogen. Staining for 2 hr at RT. Image using the azide-free form of this antibody.



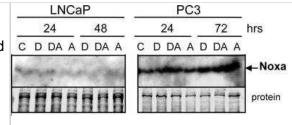
Flow Cytometry: Noxa Antibody (114C307.1) - Non-Recombinant Monoclonal [NB600-1159] - Flow cytometry after an intracellular stain was performed on MCF7 cells with Noxa [114C307.1] antibody NB600-1159AF700 (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Alexa Fluor 700.



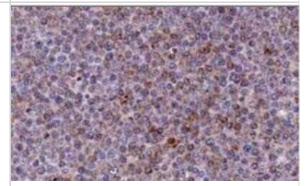
Western Blot: Noxa Antibody (114C307.1) - Non-Recombinant Monoclonal [NB600-1159] - Western blot analysis in RL-7 cells (a follicular lymphoma).



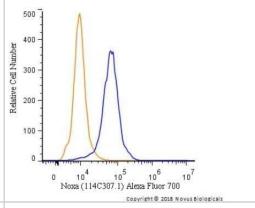
Western Blot: Noxa Antibody (114C307.1) - Non-Recombinant Monoclonal [NB600-1159] - Doc counteracts the ABT-737-mediated increase in Mcl-1 protein. Western blot showing treatment of LNCaP and PC3 cells with 1 uM ABT-737. In LNCaP and PC3, there are few difference in Noxa. Image collected and cropped by CiteAb from the following publication (https://peerj.com/articles/144), licensed under a CC-BY license.



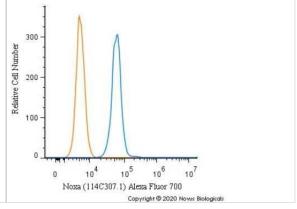
Immunohistochemistry-Paraffin: Noxa Antibody (114C307.1) - Non-Recombinant Monoclonal [NB600-1159] - Bouin-fixed, paraffinembedded Chronic Lymphocytic Leukemia (CLL) xenograft stained with Noxa antibody (1:2000), peroxidase-conjugate and DAB chromogen. Staining for 2 hr at RT. Image using the azide-free form of this antibody.



Flow Cytometry: Noxa Antibody (114C307.1) - Non-Recombinant Monoclonal [NB600-1159] - Flow cytometry after an intracellular stain was performed on HeLa cells with Noxa [114C307.1] antibody NB600-1159AF700 (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Alexa Fluor 700.



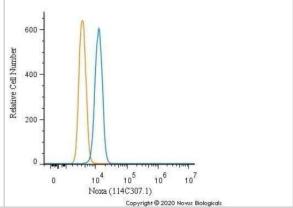
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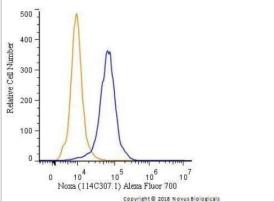
Flow Cytometry: Noxa Antibody (114C307.1) - Non-Recombinant Monoclonal [NB600-1159] - An intracellular stain was performed on Ntera2 cells with Noxa Antibody [114C307.1] NB600-1159 (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 1.0 ug/mL for 30 minutes at room temperature, followed by Mouse IgG (H+L) Cross-Adsorbed Secondary Antibody, Dylight 550 (35503, Thermo Fisher).

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Noxa (114C307.1)
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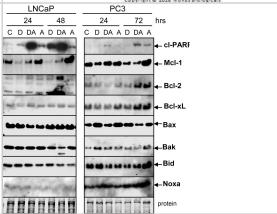
Flow Cytometry: Noxa Antibody (114C307.1) - Non-Recombinant Monoclonal [NB600-1159] - An intracellular stain was performed on Ntera2 cells with Noxa Antibody [114C307.1] NB600-1159 (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 1.0 ug/mL for 30 minutes at room temperature, followed by Mouse IgG (H+L) Cross-Adsorbed Secondary Antibody, Dylight 550 (35503, Thermo Fisher).



Flow Cytometry: Noxa Antibody (114C307.1) - Non-Recombinant Monoclonal [NB600-1159] - Flow cytometry after an intracellular stain was performed on HeLa cells with Noxa [114C307.1] antibody NB600-1159AF700 (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Alexa Fluor 700.



Doc counteracts the ABT-737-mediated increase in Mcl-1 protein. Western blot showing that treatment of LNCaP and PC3 cells with 1 µM ABT-737 (A) increases Mcl-1 but treatment with 1 nM Doc (D) decreases Mcl-1. Combination of Doc + ABT-737 (DA) decreases Mcl-1. In LNCaP, there is less Bcl-2 (D, 24 h) and Bak (DA, 48 h) but few differences in Bcl-xL, Bax, Bid, and Noxa. In PC3, there are few differences in Bcl-2, Bcl-xL, Bax, Bak, Bid, and Noxa.



← cl-PARI

72 hrs

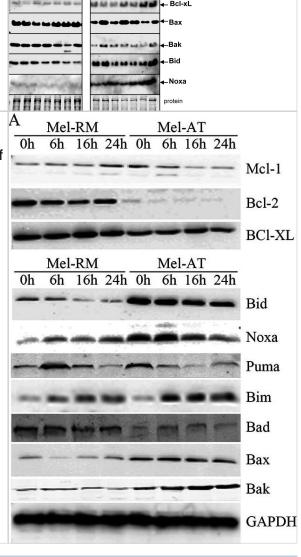
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C D DA A D DA A

C D DA A D DA A

Western Blot: Noxa Antibody (114C307.1) - Non-Recombinant Monoclonal [NB600-1159] - Doc counteracts the ABT-737-mediated increase in Mcl-1 protein.Western blot showing that treatment of LNCaP & PC3 cells with 1 µM ABT-737 (A) increases Mcl-1 but treatment with 1 nM Doc (D) decreases Mcl-1. Combination of Doc + ABT-737 (DA) decreases Mcl-1. In LNCaP, there is less Bcl-2 (D, 24 h) & Bak (DA, 48 h) but few differences in Bcl-xL, Bax, Bid, & Noxa. In PC3, there are few differences in Bcl-2, Bcl-xL, Bax, Bak, Bid, & Noxa. Image collected & cropped by CiteAb from the following publication (https://peerj.com/articles/144), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

Western Blot: Noxa Antibody (114C307.1) - Non-Recombinant Monoclonal [NB600-1159] - EGb761 regulates Bcl-2 family proteins expression in melanoma cells.(A) EGb761 alters the expression levels of anti- & pro-apoptotic Bcl-2 family proteins in melanoma cell lines. Whole cell lysates from Mel-RM & Mel-AT cells treated with EGb761 (400 µg/ml) for indicated time periods were subjected to Western blot analysis. The data shown are representative of three individual experiments. (B) 5% ethanol as control vehicle did not alter the expression levels of McI-1. MeI-AT cells with 5% ethanol for increasing periods. Whole cell lysates from Mel-AT cells treated were subjected to Western blot analysis. The data shown are representative of three individual experiments.(C) Mel-RM & Mel-AT cells were treated with EGb761 (400 µg/ml) or 5% ethanol for the indicated periods. Total RNA was isolated & subjected to real-time PCR analysis for Mcl-1. The relative abundance of mRNA expression treated with 5% ethanol was arbitrarily designated as 1. Columns, mean of three individual experiments; bars, SEM. \* Present p<0.05 vs control.(D) Relative expression of anti-apoptosis Bcl-2 family proteins in melanoma cell lines Mel-RM & Mel-AT without treatment. Quantitative expression levels of Mcl-1, Bcl-2 & Bcl-XL were normalized to GAPDH.(E) Relative expression of pro-apoptosis Bcl-2 family proteins in melanoma cell lines Mel-RM & Mel-AT without treatment. Quantitative expression levels of Bax, Bid, Noxa, PUMA, Bim, Bad & Bak were normalized to GAPDH. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/25860257), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



#### **Publications**

Hao Liu, Zhenzhan Zhang, Peilin Zhen, Meijuan Zhou High Expression of VSTM2L Induced Resistance to Chemoradiotherapy in Rectal Cancer through Downstream IL-4 Signaling Journal of Immunology Research 2021-01-08 [PMID: 33506057]

Al Shboul S, El-Sadoni M, Alhesa A et al. NOXA expression is downregulated in human breast cancer undergoing incomplete pathological response and senescence after neoadjuvant chemotherapy Sci Rep 2023-09-23 [PMID: 37741850] (Immunohistochemistry)

Asuzu DT, Alvarez R, Fletcher PA Et al. Pituitary adenomas evade apoptosis via noxa deregulation in Cushing's disease Cell Rep 2022-08-24 [PMID: 36001971] (IHC-P, Human)

#### Details:

Citation using the Alexa Fluor 532 version of this antibody.

Dewson G, Huang AS, San Chin H, Reljic B E3 ubiquitin ligase MARCHF5 controls BAK apoptotic activity independently of BH3-only proteins bioRxiv 2022-01-01 [PMID: 36171332] (WB, Human)



Zheng J, Zhuo L, Ran D et al. Cadmium induces apoptosis via generating reactive oxygen species to activate mitochondrial p53 pathway in primary rat osteoblasts Toxicology 2020-10-08 [PMID: 33031904] (WB, Rat)

#### Details:

Citation using the Non-Recombinant Monoclonal format of this antibody.

Tseng HY, Dreyer J, Emran AA et al. Co-targeting bromodomain and extra-terminal proteins and MCL1 induces synergistic cell death in melanoma Int J Cancer 2020-04-07 [PMID: 32249419]

#### Details:

Citation using the Non-Recombinant Monoclonal format of this antibody.

Djajawi TM, Liu L, Gong JN et al. MARCH5 requires MTCH2 to coordinate proteasomal turnover of the MCL1:NOXA complex Cell Death Differ 2020-02-26 [PMID: 32094511] (WB, Mouse)

#### Details:

Citation using the Non-Recombinant Monoclonal format of this antibody.

Zall H, Weber A, Besch R et al. Chemotherapeutic drugs sensitize human renal cell carcinoma cells to ABT-737 by a mechanism involving the Noxa-dependent inactivation of Mcl-1 or A1 Mol Cancer 2010-06-26 [PMID: 20576107] (WB)

#### Details:

Citation using the Non-Recombinant Monoclonal and Biotin format of this antibody.

Pilling AB, Hwang C. Targeting prosurvival BCL2 signaling through Akt blockade sensitizes castration-resistant prostate cancer cells to enzalutamide Prostate 2019-06-23 [PMID: 31228231] (WB, Human)

#### Details:

Citation using the Non-Recombinant Monoclonal format of this antibody.

Gallagher SJ, Gunatilake D, Beaumont KA et al. HDAC inhibitors restore BRAF-inhibitor sensitivity by altering PI3K and survival signalling in a subset of melanoma Int J Cancer 2017-12-07 [PMID: 29210065] (WB, Human)

#### Details:

Citation using the Non-Recombinant Monoclonal format of this antibody.

Gonzalez PS, O'Prey J, Cardaci S et al. Mannose impairs tumour growth and enhances chemotherapy Nature 2018-11-23 [PMID: 30464341] (Mouse)

#### Details:

Citation using the Non-Recombinant Monoclonal format of this antibody.

Minieri V, De Dominici M, Porazzi P et al. Targeting STAT5 or STAT5-Regulated Pathways Suppresses Leukemogenesis of Ph+ Acute Lymphoblastic Leukemia Cancer Res 2018-08-30 [PMID: 30154155] (WB, Human)

#### Details:

Citation using the Non-Recombinant Monoclonal format of this antibody.

More publications at http://www.novusbio.com/NB600-1159





## **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 NB600-1159**

NBL1-14534 Noxa Overexpression Lysate

HAF007 Goat anti-Mouse IgG Secondary Antibody [HRP]

NB720-B Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]

NBP1-43319-0.5mg Mouse IgG1 Kappa Isotype Control (P3.6.2.8.1)

#### 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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