

Product Datasheet

GAPDH Antibody NB300-320

Unit Size: 0.1 mg

Store at -20C. Avoid freeze-thaw cycles.

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NB300-320**GAPDH Antibody**

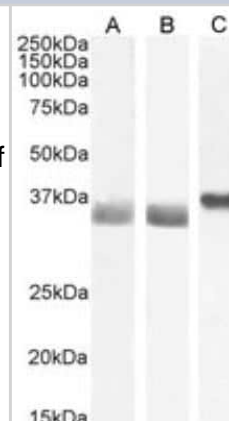
Product Information	
Unit Size	0.1 mg
Concentration	0.5 mg/ml
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	Tris saline (20 mM Tris pH 7.3, 150 mM NaCl), 0.5% BSA
Target Molecular Weight	36 kDa

Product Description	
Host	Goat
Gene ID	2597
Gene Symbol	GAPDH
Species	Human, Mouse, Rat, Canine, Drosophila, Insect
Reactivity Notes	Drosophila reactivity reported in scientific literature (PMID: 28888970 and PMID: 33046910). Canine reactivity reported in scientific literature (PMID: 30030415). Use in Mouse reported in scientific literature (PMID:32771388).
Immunogen	This GAPDG antibody was developed against the peptide sequence C-HQVVSSDFNSDT corresponding to C-Terminus according to NP_002037.2.

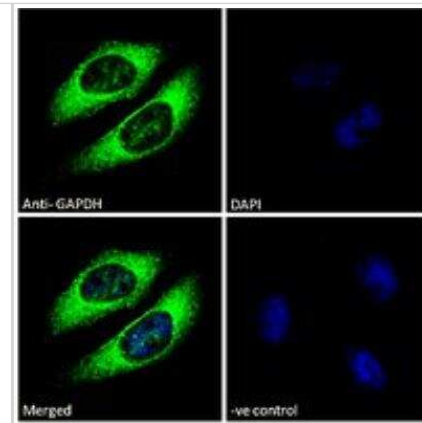
Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Peptide ELISA, Single Cell Western
Recommended Dilutions	Western Blot 0.001 - 0.003 ug/mL, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence 10 ug/mL, Immunohistochemistry-Paraffin 2.5 ug/mL, Peptide ELISA Detection limit 1:128000, Single Cell Western 100 ug/ml
Application Notes	Single Cell Western reported by an internal validation on HeLa-GFP cells at a concentration of 100 ug/ml

Images

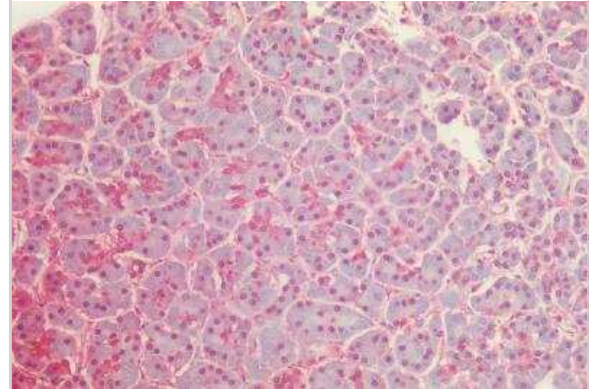
Western Blot: GAPDH Antibody [NB300-320] - Staining of Human Liver (A) and Tonsil (B) with antibody at 0.001 ug/mL and Rat Brain lysate (C) with antibody at 0.3 ug/mL (35 ug protein in RIPA buffer). Detected by chemiluminescence. Approx. 37 kDa band observed in Rat Brain lysates and approx. 35 kDa in Human Liver and Tonsil lysates (calculated MW of 36.1 kDa according to Human NP_002037.2 and 35.8 kDa according to Rat NP_058704.1).



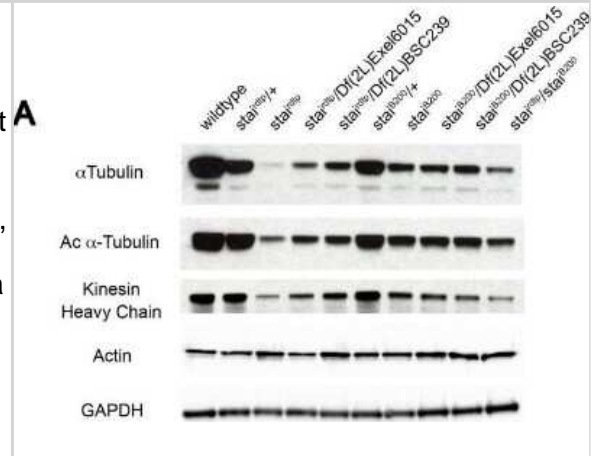
Immunocytochemistry/Immunofluorescence: GAPDH Antibody [NB300-320] - Immunofluorescence analysis of paraformaldehyde fixed HeLa cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10 ug/mL) followed by Alexa Fluor 488 secondary antibody (2 ug/mL), showing cytoplasmic and vesicle staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10 ug/mL) followed by Alexa Fluor 488 secondary antibody (2 ug/mL). Strong expression of the protein seen in the cytoplasm and vesicles of HeLa cells.



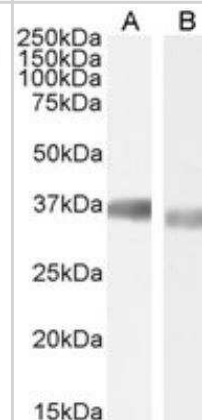
Immunohistochemistry-Paraffin: GAPDH Antibody [NB300-320] - Staining of paraffin embedded Human Pancreas. Antibody at 2.5 ug/mL. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



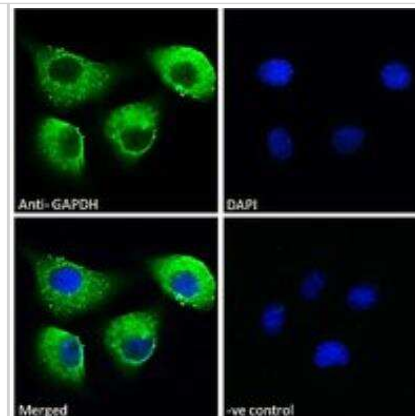
Western Blot: GAPDH Antibody [NB300-320] - stai Mutants Have Reduced Levels of alpha-Tubulin, Acetylated alpha-Tubulin, and Kinesin Heavy Chain Protein. Representative western blots of total protein extracted from stai mutant third instar larvae. Heterozygous stai/+ mutant larvae exhibit mild reductions in the levels of alpha-tubulin and acetylated alpha-tubulin compared with wild type larvae. Homozygous stai mutant larvae have dramatic reductions in the levels of alpha-tubulin, acetylated alpha-tubulin and the heavy chain subunit of the microtubule motor protein kinesin compared to wildtype. Df(2L) BSC239 represents a second chromosomal deficiency that excludes the stai gene. GAPDH is used as a loading control. Image collected and cropped by CiteAb from the following publication (<https://dx.plos.org/10.1371/journal.pone.0068324>), licensed under a CC-BY license.



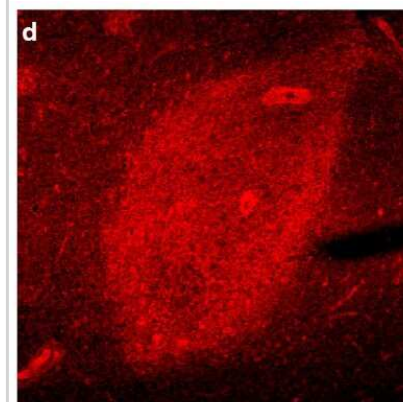
Western Blot: GAPDH Antibody [NB300-320] - Staining of HEK293 (A) and HeLa (B) cell lysate (35 ug protein in RIPA buffer). Antibody at 0.001 ug/mL. Detected by chemiluminescence. Approx 36 kDa band observed in lysates of cell line HEK293 and approx. 35 kDa in HeLa cell lysates. (calculated MW of 36.1 kDa according to Human NP_002037.2).



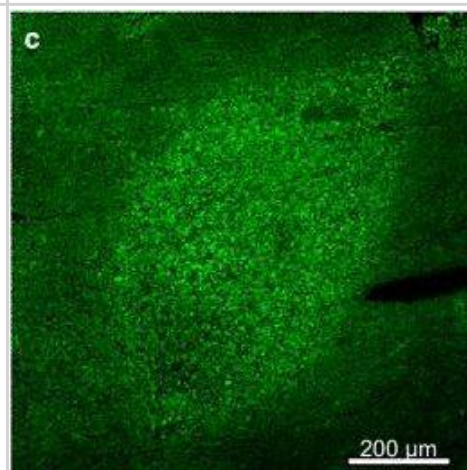
Immunocytochemistry/Immunofluorescence: GAPDH Antibody [NB300-320] - Immunofluorescence analysis of paraformaldehyde fixed A549 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10 ug/mL) followed by Alexa Fluor 488 secondary antibody (2 ug/mL), showing cytoplasmic and vesicle staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10 ug/mL) followed by Alexa Fluor 488 secondary antibody (2 ug/mL). Strong expression of the protein seen in the cytoplasm and vesicles of A549 cells.



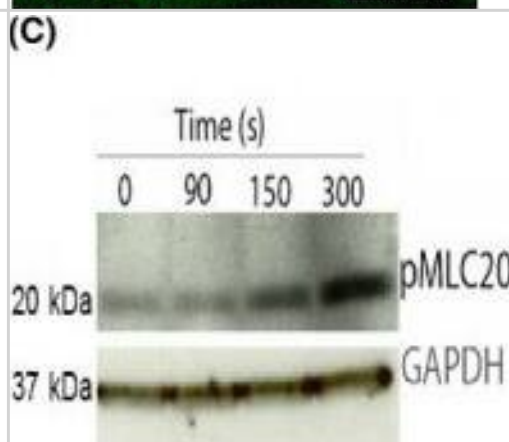
Immunohistochemistry-Paraffin: GAPDH Antibody [NB300-320] - Upregulation of GAPDH and Tom20 in C6 gliomas. A small glioma labeled with antibodies against GAPDH. The brightness and contrast have been increased. Image collected and cropped by CiteAb from the following publication (<https://www.biomedcentral.com/1756-0500/8/207>), licensed under a CC-BY license.



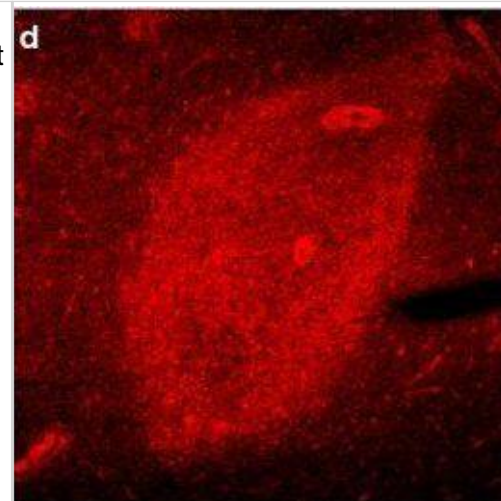
Upregulation of GAPDH & Tom20 in C6 gliomas. a A section of rat brain stained with hematoxylin & eosin to show a glioma produced by implantation of C6 cells in the right caudate nucleus. In this case, cells also grew in the region of the syringe needle track through the cortex. (b–d). A small glioma labeled by bisbenzamide (b) & with antibodies against Tom20 (c) & GAPDH (d). The brightness & contrast have been increased. e Illustration of a strip perpendicular to the rim of a glioma (labeled with bisbenzamide) & along which intensity profiles were measured. f, g Tom20 & GAPDH fluorescence along such a strip (barely visible without enhancement). The graphs show the raw intensity values given by ImageJ. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/26032618>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



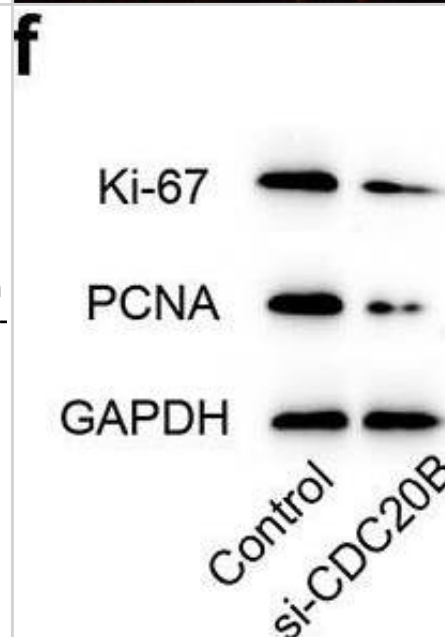
Western Blot: GAPDH Antibody [NB300-320] - PAR2 causes contraction of smooth muscle cells from human prostate. (A & B) Decrease in diameter of collagen hydrogels after PAR2 activation with SLIGKV (80 μM). (C) Representative western blot & (D) densitometry showing time dependent increase in level of phosphorylated MLC20 in PSMC after PAR2 is activated. Data represent mean ± SEM of at least three independent experiments. Diameter of collagen hydrogels were measured in ImageJ (version 1.50i) & significance analyzed in Prism (version 7.04) with one-way ANOVA followed by Tukey's multiple comparison test. *P < 0.05, **P < 0.01 Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/31198907>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



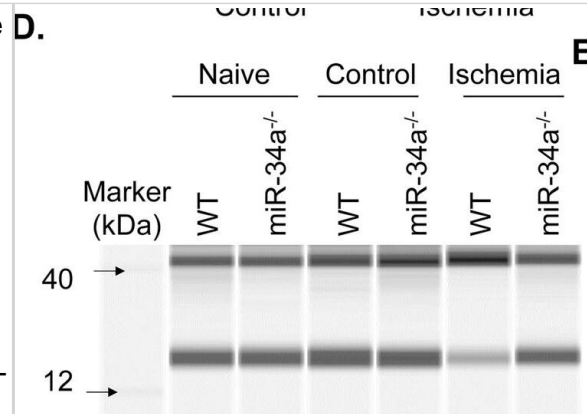
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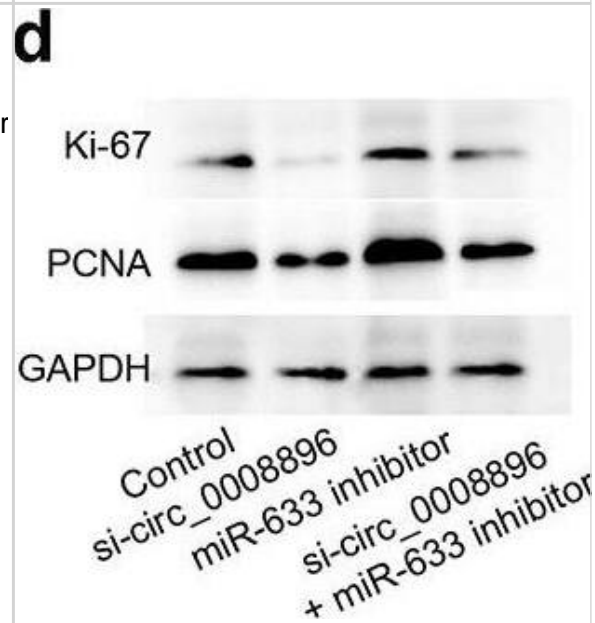
Western Blot: GAPDH Antibody [NB300-320] - CDC20B was the protein effector regulated by hsa-miR-633. (a) CDC20B level was up-regulated after ox-LDL treatment revealed by Western blotting. (b) CDC20B level was decreased after the treatment of hsa-miR-633 mimics revealed by Western blotting. (c) CDC20B level was increased after the treatment of hsa-miR-633 inhibitor revealed by Western blotting. (d) The luciferase reporter plasmids were constructed as illustrated. (e) Relative luciferase activities after co-transfection CDC20B WT & hsa-miR-633/Control, or CDC20B Mut & hsa-miR-633/Control were measured. (f) The expression levels of two proliferation markers, Ki67 & PCNA after the treatment of si-CDC20B were measured using Western blotting. (g) Colony formation assay was conducted to examine the proliferation ability after the treatment of si-CDC20B. (h) Transwell migration & invasion assays were conducted to examine the migration & invasion abilities of VSMCs after the treatment of si-CDC20B. (i) Quantification results of (g). (j) Quantification results of (h). *P < 0.05, **P < 0.01, ***P < 0.001. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/35212610>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



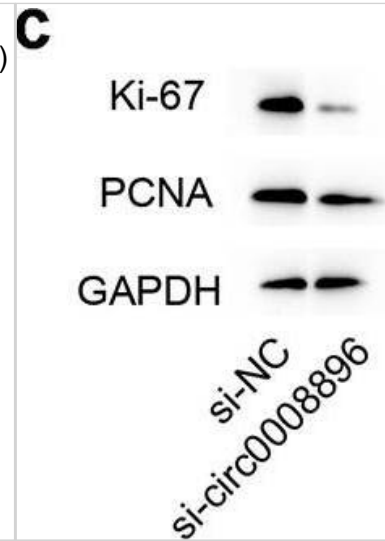
Simple Western: GAPDH Antibody [NB300-320] - MiR-34a affects stroke outcomes via interacting with cytochrome c. (A) WES system image showing CYC, VDAC & GAPDH expression from hemispheres of WT & miR-34a^{-/-} mice at 6 h post-stroke. (B) Relative CYC expression normalized to GAPDH from the data generated by the WES system. CYC level is significantly decreased in ischemic hemispheres of WT mice but no significant changes in miR-34a^{-/-} mice between contralateral hemispheres (Control) & ischemic hemispheres (Ischemia). N = 5 per group, **p < 0.01, One-way ANOVA followed by post hoc Tuckey's test was used for data analysis. Data are expressed as mean ± S.D. (C) Relative VDAC expression normalized to GAPDH from the data generated by the WES system. VDAC was not significantly altered in WT mice nor miR-34a^{-/-} mice. (D) Multiplexed WES system image showing CYC & GAPDH expression from purified pCECs of WT & miR-34a^{-/-} mice (n = 10 per group, pooled cell samples) at 6 h post-stroke. (E) Relative CYC expression by normalization to GAPDH. A 2.8 fold decrease of CYC level was observed in WT mice but no changes were observed in miR-34a^{-/-} mice between contralateral hemispheres & ischemic hemispheres. (F) A CYC reporter was coexpressed with a miR-34a plasmid, a miR-34a mimic, a miR-34c mimic, or a plasmid control in cultured cerebral vascular endothelial cells for 24 hours. Relative firefly luciferase activity was evaluated & normalized to renilla luciferase activity. Relative firefly luciferase activity was reduced by miR-34a plasmid & miR-34a mimic. The experiment was repeated 3 times & triplicates were used for each analysis. Data represents the mean ± S.D. *p < 0.05. One-way ANOVA followed by post-hoc Tuckey's test was used for analysis. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/32094435>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



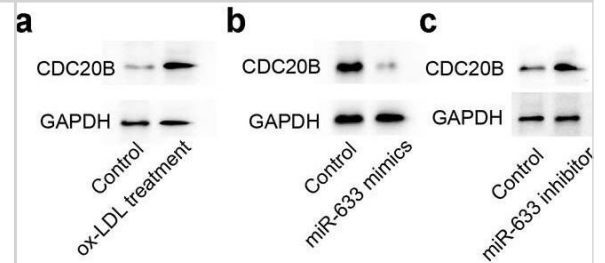
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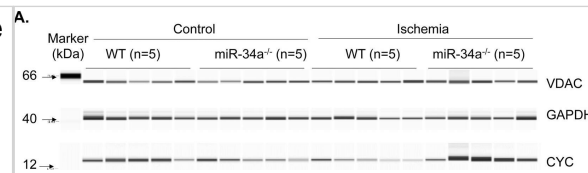
Western Blot: GAPDH Antibody [NB300-320] - Down-regulation of hsa_circ_0008896 inhibited proliferation, migration & invasion in vitro. (a) The expression level of hsa_circ_0008896 after si-circ_0008896 transfection was detected using quantitative PCR. (b) CCK8 assay was conducted to measure cell viability after down-regulation of hsa_circ_0008896. (c) The expression levels of two proliferation markers, Ki67 & PCNA after down-regulation of hsa_circ_0008896 were detected using Western blotting. (d) Colony formation assay was conducted to examine proliferation ability after down-regulation of hsa_circ_0008896. (e) The quantification results of (d). (f) Transwell migration & invasion assays were conducted to examine the migration & invasion abilities of VSMCs after down-regulation of hsa_circ_0008896. (g) The quantification results of (f). *P < 0.05, **P < 0.01, ***P < 0.001. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/35212610>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



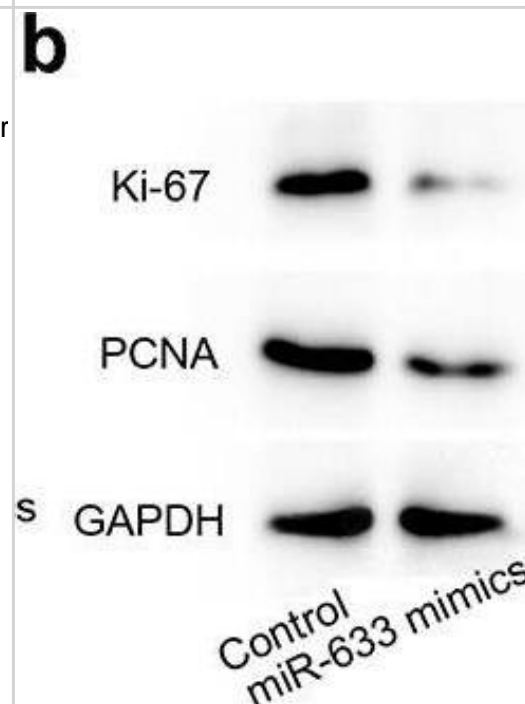
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Publications

Chen, X;Wang, F;Tang, J;Meng, J;Han, Z; Paralemmin-3 augments lipopolysaccharide-induced acute lung injury with M1 macrophage polarization via the notch signaling pathway *Respiratory physiology & neurobiology* 2023-12-14 [PMID: 38103708]

Christoph Kuppe, Mahmoud M Ibrahim, Jennifer Kranz, Xiaoting Zhang, Susanne Ziegler, Javier Perales-Patón, Jitske Jansen, Katharina C. Reimer, James R. Smith, Ross Dobie, John R. Wilson-Kanamari, Maurice Halder, Yaoxian Xu, Nazanin Kabgani, Nadine Kaesler, Martin Klaus, Lukas Gernhold, Victor G. Puelles, Tobias B. Huber, Peter Boor, Sylvia Menzel, Remco M. Hoogenboezem, Eric M.J. Bindels, Joachim Steffens, Jürgen Floege, Rebekka K Schneider, Julio Saez-Rodriguez, Neil C Henderson, Rafael Kramann Decoding myofibroblast origins in human kidney fibrosis *Nature* 2021-08-23 [PMID: 33176333]

Yamada T, Yoshinari Y, Tobo M et al. Nac? protects the larval fat body from cell death by maintaining cellular proteostasis in *Drosophila* *Nature communications* 2023-09-01 [PMID: 37658058] (WB, *Drosophila*)

Haykal M, Rodrigues-Ferreira S, Nahmias C Aneuploidy triggers vulnerability to WEE1 inhibition via severe chromosome pulverization *bioRxiv* 2023-09-19 (WB, Human)

Lemma RB, Ledsaak M, Fuglerud BM et al. MYB regulates the SUMO-protease SENP1 and its novel interaction partner UXT - modulating MYB target genes and the SUMO landscape *The Journal of biological chemistry* 2023-07-17 [PMID: 37468105] (WB, Human)

Renz C, Asimaki E, Meister C et al. Ubiquiton - An Inducible, Linkage-Specific Polyubiquitylation Tool Available at SSRN 2023-04-18 (WB, Human)

Udayakumar PD Dissecting the transactivation domain (tAD) of the transcription factor c-Myb to assess recent models of tAD function *FEBS Open Bio* 2020-09-16 [PMID: 32937031]

Krohn L The genetics of REM sleep behavior disorder and its conversion to overt neurodegeneration Thesis (WB, Human)

Winnica DE, Monzon A, Ye S et al. Airway epithelial Paraoxonase-2 in obese asthma *PloS one* 2022-03-14 [PMID: 35286330] (WB, Human)

Hou X, Dai H, Zheng y Circular RNA hsa_circ_0008896 accelerates atherosclerosis by promoting the proliferation, migration and invasion of vascular smooth muscle cells via hsa-miR-633/CDC20B (cell division cycle 20B) axis *Bioengineered* 2022-03-01 [PMID: 35212610] (WB, Human)

Hu, H, Hone, E A Et al. MiR-34a Interacts with Cytochrome c and Shapes Stroke Outcomes. *Sci Rep* 2020-02-24 [PMID: 32094435] (ICC/IF, Mouse)

Nagasaki T, Schuyler AJ, Zhao J Et al. 15LO1 dictates glutathione redox changes in asthmatic airway epithelium to worsen type-2 inflammation *The Journal of clinical investigation* 2021-11-11 [PMID: 34762602] (WB, Human)

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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

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

Products Related to NB300-320

NBL1-10967	GAPDH Overexpression Lysate
HAF017	Rabbit anti-Goat IgG Secondary Antibody [HRP (Horseradish Peroxidase)]
HAF109	Donkey anti-Goat IgG Secondary Antibody [HRP (Horseradish Peroxidase)]
NB410-28088-1mg	Goat IgG Isotype Control

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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