Product Datasheet

GAPDH Antibody (6C5cc) - BSA Free
NB600-502-0.2mg

Unit Size: 0.2 mg

Store at 4C. Do not freeze.

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Reviews: 3 Publications: 87

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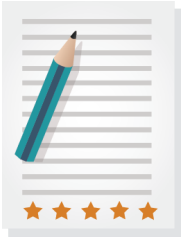
Updated 9/9/2025 v.20.1



NB600-502-0.2mg

GAPDH Antibody (6C5cc) - BSA Free

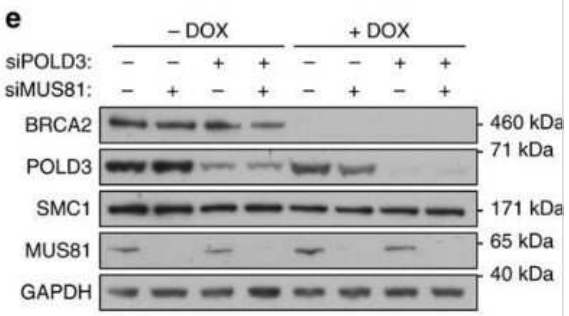
Product Information	
Unit Size	0.2 mg
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C. Do not freeze.
Clonality	Monoclonal
Clone	6C5cc
Preservative	0.09% Sodium Azide
Isotype	IgG1
Purity	Protein A purified
Buffer	PBS (pH 7.4)
Target Molecular Weight	36 kDa

Product Description	
Description	Novus Biologicals Mouse GAPDH Antibody (6C5cc) - BSA Free (NB600-502) is a monoclonal antibody validated for use in IHC, WB, ELISA, ICC/IF, Simple Western and IP. Anti-GAPDH Antibody: Cited in 83 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Mouse
Gene ID	2597
Gene Symbol	GAPDH
Species	Human, Mouse, Rat, Porcine, Amphibian, Canine, Chinese Hamster, Feline, Fish, Rabbit, Bovine (Negative), Goat (Negative)
Reactivity Notes	Please note that this antibody is reactive to Mouse and derived from the same host, Mouse. Additional Mouse on Mouse blocking steps may be required for IHC and ICC experiments. Please contact Technical Support for more information. Chinese Hamster reactivity reported in scientific literature (PMID: 26115091).
Immunogen	Hybridoma clone has been derived from hybridization of Sp2/0 myeloma cells with spleen cells of Balb/c mice immunized with Rabbit GAPDH.

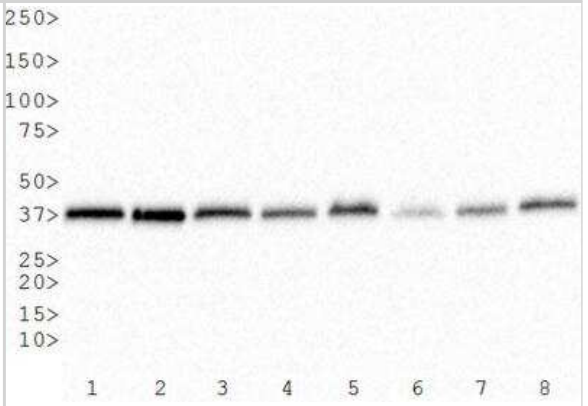
Product Application Details	
Applications	Western Blot, Simple Western, Immunohistochemistry-Paraffin, ELISA, Immunoassay, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunoprecipitation
Recommended Dilutions	Western Blot 0.5-1 ug/ml, Simple Western 1:100, ELISA, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence 1:10-1:2000, Immunoprecipitation, Immunohistochemistry-Paraffin, Immunoassay
Application Notes	Use in IHC-P reported in scientific literature (PMID:34496231). Since GAPDH is expressed in all cells it is for example becoming the marker of choice for a loading control in Western Blotting. See Simple Western Antibody Database for Simple Western validation: tested in HeLa lysate (0.5 mg/ml); antibody dilution of 1:100; separated by size; detects a band at 42 kDa

Images

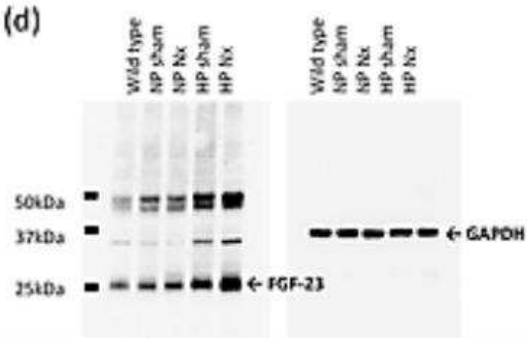
Western Blot: GAPDH Antibody (6C5) [NB600-502] - MUS81 promotes DNA synthesis during mitosis in BRCA2-deficient cells. Cell extracts were immunoblotted as indicated. SMC1 and GAPDH were used as loading controls. Image collected and cropped by CiteAb from the following publication (https://www.nature.com/doifinder/10.1038/ncomms15983), licensed under a CC-BY license.



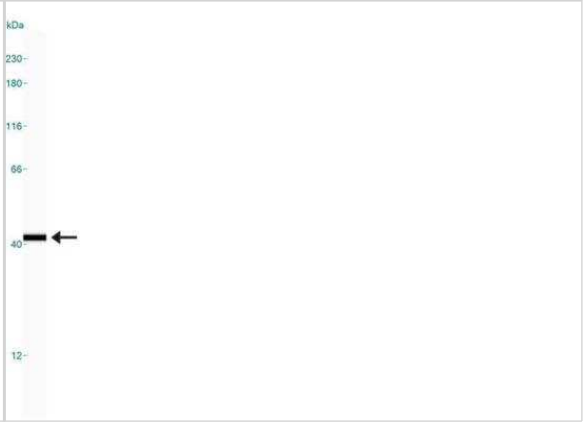
Western Blot: GAPDH Antibody (6C5) [NB600-502] - Western blot analysis of GAPDH expression in 1) HeLa, 2) NTERA-2, 3) A-431, 4) HepG2, 5) MCF-7, 6) NIH 3T3, 7) PC-12 and 8) COS-7 whole cell lysates. Theoretical molecular weight: 36 kDa.

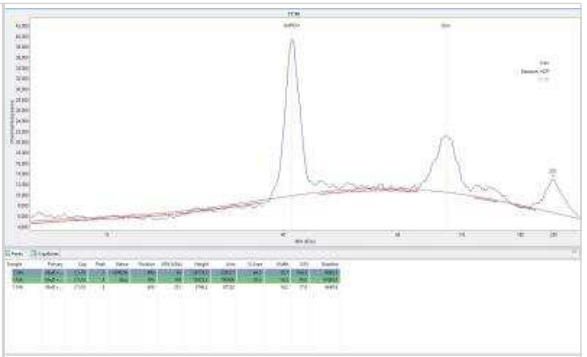
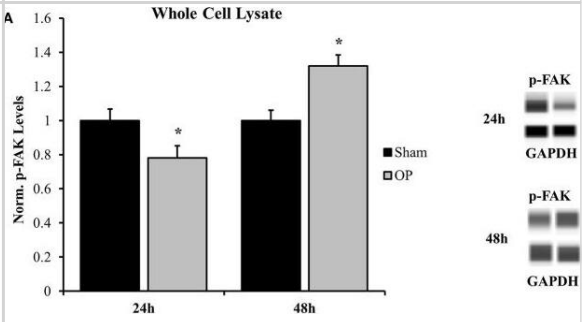
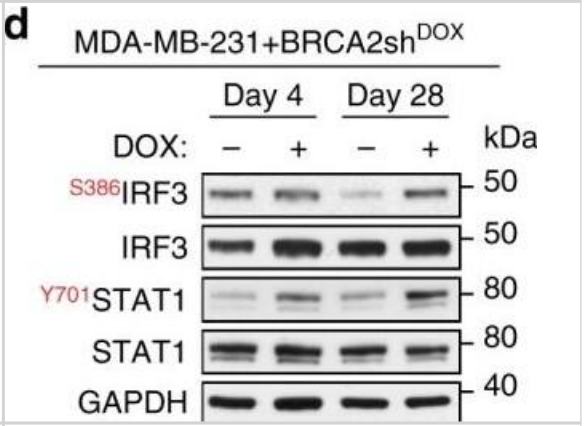
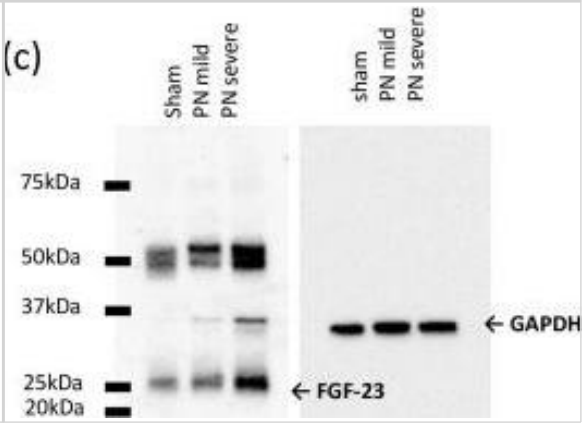


Western Blot: GAPDH Antibody (6C5) [NB600-502] - Western blot of FGF23 in the kidney. GAPDH antibody (6C5) served as an internal control. Each value represents the mean +/- SEM. Citation: Sugiura H, Matsushita A, Futaya M, Teraoka A, Akiyama K-i, Usui N, et al. (2018) Fibroblast growth factor 23 is upregulated in the kidney in a chronic kidney disease rat model. PLoS ONE 13(3): e0191706. https://doi.org/10.1371/journal.pone.0191706

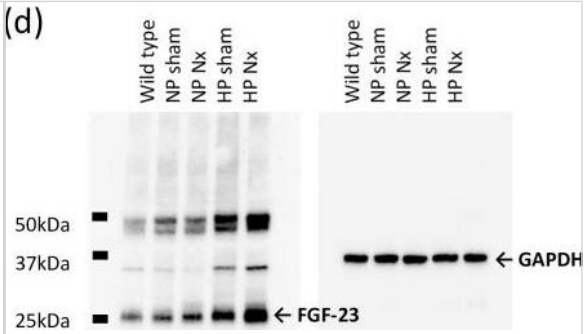


Simple Western: GAPDH Antibody (6C5) [NB600-502] - Simple Western lane view shows a specific band for GAPDH in 0.5 mg/ml of HeLa lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system. Note: band observed higher than predicted 36 kDa molecular weight.

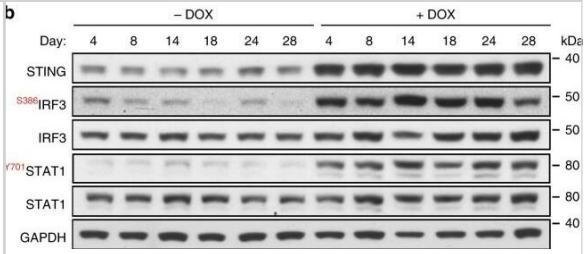


Simple Western: GAPDH Antibody (6C5) [NB600-502] - Anaylsis in rat brain and spinal cord. This image includes the GAPDH at the predicted kDa as well as a glucocorticoid receptor antibody (peak 102). Verified customer review.	
Western Blot: GAPDH Antibody (6C5cc) [NB600-502] - Western blot analysis for whole cell & nuclear signal transduction proteins. (A) Phosphorylated FAK (Y397) was significantly decreased at 24 h & significantly increased at 48 h as compared to sham. (B) Nuclear localization of corresponding signal transduction molecules, p38, & p65, were decreased at 24 h & increased at 48 h as compared to sham. *p < 0.05, #p = 0.056, Data are represented as mean ± SEM, whole cell: n = 9–10/group; nuclear: n = 7–9/group. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/30853931), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	
Western Blot: GAPDH Antibody (6C5cc) [NB600-502] - Upregulation of innate immune response genes in BRCA2-deficient human cells. a Venn diagram of common genes upregulated in H1299 & MDA-MB-231 human cells, upon chronic (28 days) DOX-induced BRCA2 depletion. b Gene set enrichment analysis (Gene Ontology—Biological Process database) of the 28 genes upregulated upon chronic BRCA2 inactivation in both H1299 & MDA-MB-231 cells. c, d Whole-cell extracts prepared after 4 & 28 days of DOX treatment were immunoblotted as indicated. GAPDH was used as a loading control. Phosphorylation site are indicated in red Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/31316060), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	
Western Blot: GAPDH Antibody (6C5cc) [NB600-502] - FGF23 expression in the partial nephrectomy rat model.(a) Serum FGF23 concentration. (b) FGF23 mRNA expression in the kidney. Sham group was used as a normalization control. (c) Western blot of FGF23 in the kidney. (d) Histology in the kidney. HE: hematoxylin-eosin staining. MT: Masson's trichrome staining to evaluate fibrosis. VK: Von Kossa staining to evaluate calcification. *P<0.05, **P<0.01, ***P<0.001; sham group (n = 6), partial nephrectomy mild group (PN mild) (n = 6), partial nephrectomy severe group (PN severe) (n = 6). Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/29518087), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	

Western Blot: GAPDH Antibody (6C5cc) [NB600-502] - FGF23 expression in hemi-nephrectomized rats fed a high-P diet.(a) Serum FGF23 concentration. (b) FGF23 mRNA expression in the bone. NP sham group was used as a normalization control. (c) FGF23 mRNA expression in the kidney. NP sham group was used as a normalization control. (d) Western blot of FGF23 in the kidney. GAPDH was used as an internal control. Each value shown represents the mean ± SEM; *P<0.05, **P<0.01; NP sham group (n = 8), NP Nx group (n = 7), HP sham group (n = 7) & HP Nx group (n = 9). Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/29518087), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

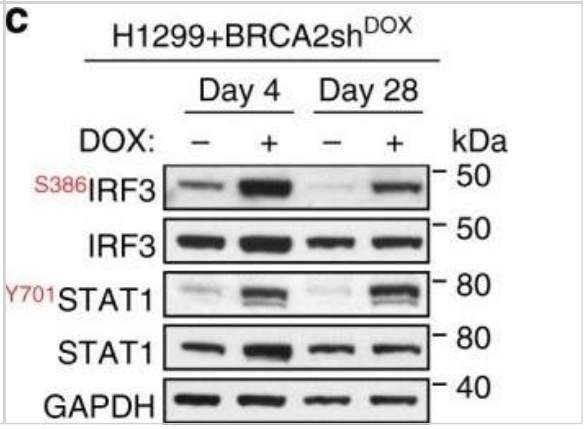


Western Blot: GAPDH Antibody (6C5cc) [NB600-502] - Time course of innate immune response activation in BRCA2-deficient cells. a H1299 cells expressing a DOX-inducible BRCA2 shRNA were grown in the presence or absence of DOX for 28 days. Cells collected every 2 days were subjected to quantitative RT-PCR analyses using primers specific for indicated genes. mRNA levels were expressed relative to the gene encoding β-actin & to day 2 (2−ΔΔCT). n = 3 independent experiments, each performed in triplicates. Each dot represents a single replicate. b Whole-cell extracts prepared at indicated times after DOX addition were immunoblotted as shown. GAPDH was used as a loading control. Phosphorylation sites are indicated in red Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/31316060), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

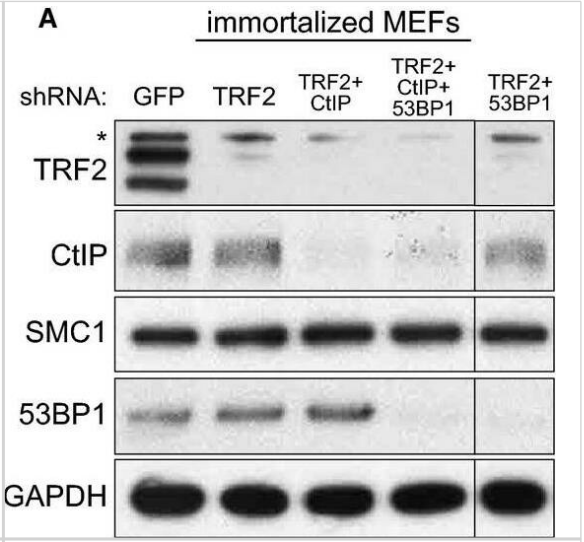


Western Blot: GAPDH Antibody (6C5cc) [NB600-502] - Decreased proliferation rates in ALDH2□deficient human fibroblasts upon HR abrogationA–CHuman fibroblasts carrying either WT ALDH2 or the E487K homozygous ALDH2 mutation were transfected with control (SCR) or siRNAs against BRCA1 (A), BRCA2 (B), or RAD51 (C). Cells were processed for proliferation assays 48 h after transfection. siRNAs were retransfected at an interval of 4 days. Graphs are representative of three independent experiments, each performed with three technical replicas. Error bars represent SD of three technical replica values obtained from a single experiment. Cell extracts were prepared 48 h after transfection & immunoblotted as shown. SMC1 or GAPDH were used as loading controls. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/28729482), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

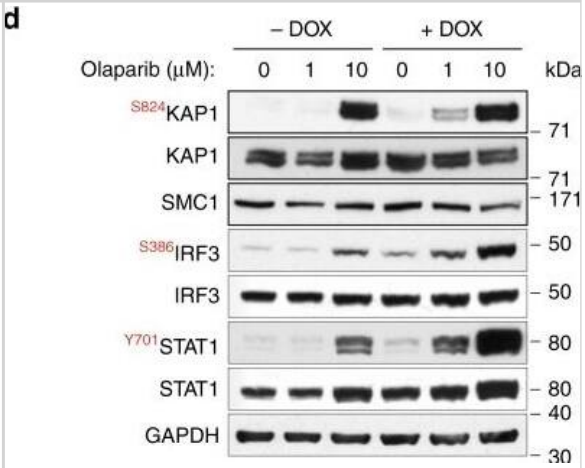
Western Blot: GAPDH Antibody (6C5cc) [NB600-502] - Upregulation of innate immune response genes in BRCA2-deficient human cells. a Venn diagram of common genes upregulated in H1299 & MDA-MB-231 human cells, upon chronic (28 days) DOX-induced BRCA2 depletion. b Gene set enrichment analysis (Gene Ontology—Biological Process database) of the 28 genes upregulated upon chronic BRCA2 inactivation in both H1299 & MDA-MB-231 cells. c, d Whole-cell extracts prepared after 4 & 28 days of DOX treatment were immunoblotted as indicated. GAPDH was used as a loading control. Phosphorylation site are indicated in red Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/31316060), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



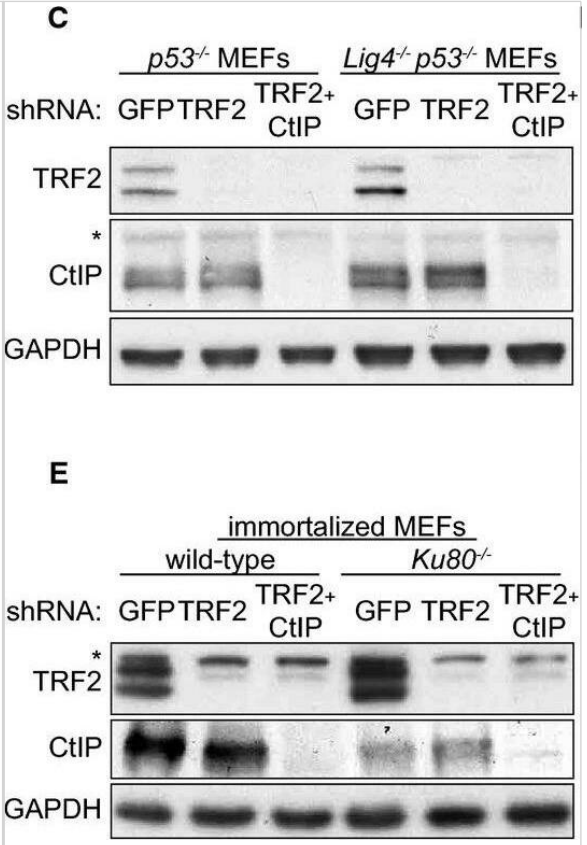
Western Blot: GAPDH Antibody (6C5cc) [NB600-502] - CtIP is not required for degradation of the single-stranded telomeric overhang generated by TRF2 inactivationImmortalized MEFs were infected with retroviruses expressing the indicated shRNAs, followed by selection with puromycin for 72 h. Cell extracts were prepared 48 h later & analysed by Western blotting as indicated. SMC1 & GAPDH were used as loading controls. *non-specific band.MboI- & AluI-digested DNA from cells treated as in (A) was resolved by pulsed-field gel electrophoresis & probed with end-labelled (AACCCT)4 probe. Representative pulsed-field gel samples run under native & denatured conditions are shown.Quantification of the 3′ overhang in cells treated as in (B). For each sample, the ss/total DNA ratios were expressed relative to the GFP shRNA-treated control. Error bars represent SD of two independent experiments. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/25582120), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Western Blot: GAPDH Antibody (6C5cc) [NB600-502] - ISG induction in HR-deficient human cells & tumors & olaparib impact on this process. a Upregulation of innate immune response genes in BRCA2-deleted ovarian tumors (n = 4) versus tumors with median BRCA2 mRNA expression (n = 145). b Upregulation of innate immune response genes in RAD51-deleted ovarian tumors (n = 11) versus tumors with median RAD51 mRNA expression (n = 145). Dots in graphs represent individual tumors. Middle line (white), median; box limits 25 & 75 percentiles; whiskers, minimum & maximum values. c H1299 cells expressing a DOX-inducible BRCA2 shRNA were grown in the presence or absence of DOX for 4 days. Then, olaparib (1 or 10 μM) was added for 72 h, followed by quantitative RT-PCR analyses. Primers specific for the indicated genes were used. mRNA levels were expressed relative to the gene encoding β-actin & to untreated (−DOX) control cells (2−ΔΔCT). Error bars represent SD of n = 3 independent experiments. *, p < 0.05 (unpaired two-tailed t test). d Whole-cell extracts from cells treated as in (c) were immunoblotted as shown. GAPDH & SMC1 were used as loading controls. Phosphorylation sites are indicated in red. e Cells treated as in (c) were pulse-labeled with EdU for 30 min. Frequency of cells in G1, S, & G2/M stages of the cell cycle were determined using FACS analyses of EdU incorporation & propidium iodide staining. Error bars represent SD of n = 3 independent experiments Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/31316060), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Western Blot: GAPDH Antibody (6C5cc) [NB600-502] - BRCA1 & CtIP mediate Ku- & LIG4-independent telomere fusionsImmortalized Brca1F/− MEFs were infected with retroviruses expressing the indicated shRNAs and/or Cre recombinase, followed by selection with puromycin for 72 h. Mitotic chromosomes isolated 48 h later were fixed & stained with a Cy3-conjugated (CCCTAA)3-PNA probe. The frequency of end-to-end chromosome-type fusions is represented as a percentage of fusions observed after TRF2 depletion. A minimum of 2,000 chromosomes were scored for each sample. Error bars represent SD of three independent experiments. P-values were calculated using an unpaired two-tailed t-test. NS, P > 0.05.Immortalized Brca1F/C61G MEFs were infected with retroviruses expressing the indicated shRNAs and/or Cre recombinase, followed by selection with puromycin for 72 h. The frequency of end-to-end chromosome-type fusions was analysed as in (A).MEFs of the indicated genotypes were infected with retroviruses expressing TRF2 and/or CtIP shRNAs, followed by selection with puromycin for 72 h. Cell extracts were prepared 48 h later & analysed by Western blotting as indicated. GAPDH was used as a loading control. *non-specific band. Cells treated as in (C) & (E) were arrested in mitosis with colcemid, & mitotic chromosomes isolated 48 h later were fixed & stained with a Cy3-conjugated (CCCTAA)3-PNA probe (D, F). The frequency of end-to-end chromosome-type fusions is represented as a percentage of fusions observed after TRF2 depletion. Error bars represent SD of two independent experiments. P-values were calculated using an unpaired two-tailed t-test. *P ≤ 0.05. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/25582120), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

van Senten JR, M□ller TC, Moo EV et al. Use of CRISPR/Cas9-edited HEK293□cells reveals that both conventional and novel protein kinase C isozymes are involved in mGlu(5a) receptor internalization Journal of Biological Chemistry 2022-10-01 [PMID: 36087841] (Western Blot, Mouse)

Jones CE, Sharick JT, Colbert SE et al. Pten regulates collagen fibrillogenesis by fibroblasts through SPARC PloS one 2021-02-03 [PMID: 33534863] (Western Blot, Mouse)

Mendes VI, Bartholomeusz GA, Ayres M et al. Synthesis and cytotoxic activity of novel A-ring cleaved ursolic acid derivatives in human non-small cell lung cancer cells Eur J Med Chem 2016-07-22 [PMID: 27484517] (Western Blot, Mouse)

Zakharova IO, Bayunova LV, Zorina II et al. Insulin and ?-Tocopherol Enhance the Protective Effect of Each Other on Brain Cortical Neurons under Oxidative Stress Conditions and in Rat Two-Vessel Forebrain Ischemia/Reperfusion Injury International Journal of Molecular Sciences 2021-10-29 [PMID: 34769198] (Western Blot, Mouse)

Park M, Baker W, Cambow D et al. Methamphetamine Enhances HIV-Induced Aberrant Proliferation of Neural Progenitor Cells via the FOXO3-Mediated Mechanism Molecular Neurobiology 2021-11-01 [PMID: 33983546] (Western Blot, Block/Neutralize)

Torices S, Teglas T, Naranjo O et al. Occludin Regulates HIV-1 Infection by Modulation of the Interferon Stimulated OAS Gene Family Molecular Neurobiology 2023-09-01 [PMID: 37209263] (Western Blot, Block/Neutralize)

Peyravian N, Sun E, Dikici E et al. Opioid Antagonist Nanodrugs Successfully Attenuate the Severity of Ischemic Stroke Molecular Pharmaceutics 2022-07-04 [PMID: 35506882]

Dimitrios Kleidonas, Matthias Kirsch, Geoffroy Andrieux, Dietmar Pfeifer, Melanie Boerries, Andreas Vlachos Microglia modulate TNFα-mediated synaptic plasticity. Glia 2023-05-19 [PMID: 37208965]

Youn EK, Cho HM, Jung JK et al. Pathologic HDAC1/c-Myc signaling axis is responsible for angiotensinogen transcription and hypertension induced by high-fat diet Biomedicine & pharmacotherapy = Biomedecine & pharmacotherapie 2023-05-25 [PMID: 37244179] (WB, Mouse)

Torices S, Teglas T, Naranjo O et al. Occludin regulates HIV-1 infection by modulation of the interferon stimulated OAS gene family Research square 2023-01-30 [PMID: 36778388] (WB, Human)

Details:
Dilution used in WB 1:20,000

Zhao YM, Sun RS, Duan F et al. Intravitreal slow-release dexamethasone alleviates traumatic proliferative vitreoretinopathy by inhibiting persistent inflammation and M□ller cell gliosis in rabbits International journal of ophthalmology 2023-01-18 [PMID: 36659954] (WB, Rabbit)

Details:
Dilution used in WB 1:1000

Cao R, Chen P, Wang H et al. Intrafusal-fiber LRP4 for muscle spindle formation and maintenance in adult and aged animals Nature communications 2023-02-10 [PMID: 36765071] (WB, Mouse)

More publications at http://www.novusbio.com/NB600-502

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 NB600-502-0.2mg

NBP1-42569	HepG2 Whole Cell Lysate
NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB7539	Goat anti-Mouse IgG (H+L) Secondary Antibody [HRP]
NBP1-97005-0.5mg	Mouse IgG1 Isotype Control (MG1)

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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