Product Datasheet

GADD153/CHOP Antibody (9C8) - BSA Free
NB600-1335

Unit Size: 0.1 ml

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

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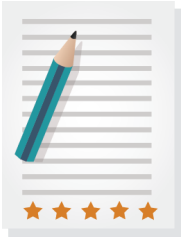
Updated 9/9/2025 v.20.1



NB600-1335

GADD153/CHOP Antibody (9C8) - BSA Free

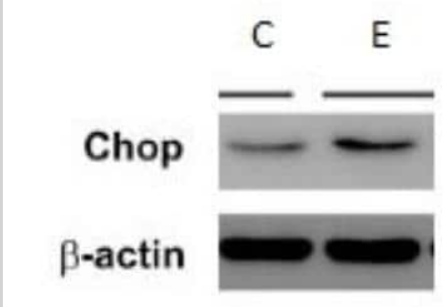
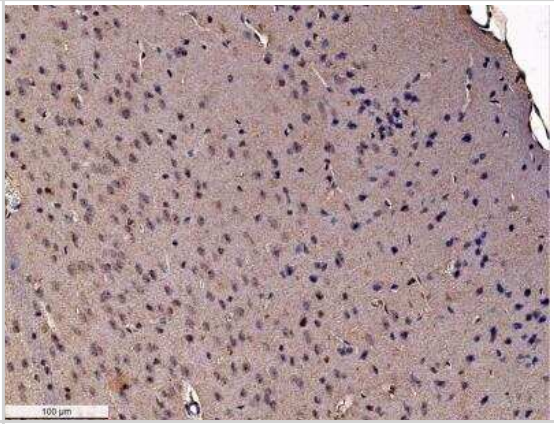
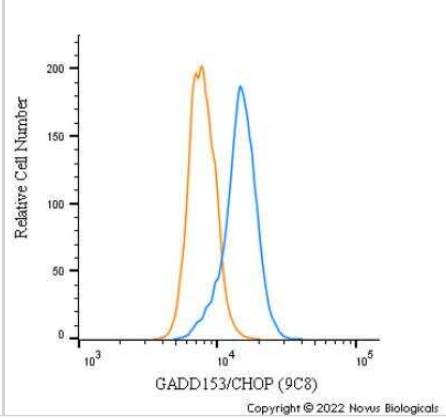
Product Information	
Unit Size	0.1 ml
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	9C8
Preservative	0.05% Sodium Azide
Isotype	IgG2b Kappa
Purity	Protein A purified
Buffer	PBS
Target Molecular Weight	19 kDa

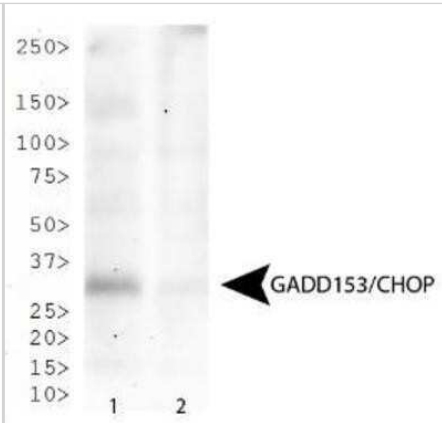
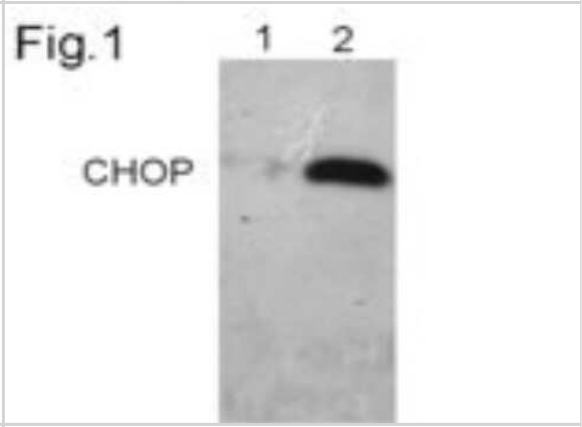
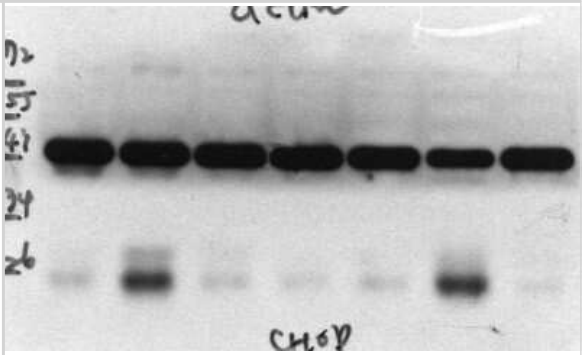
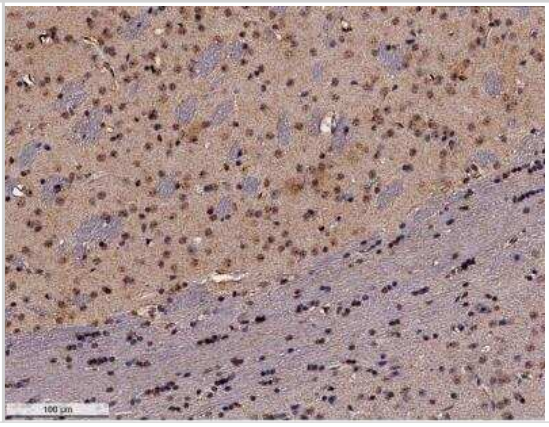
Product Description	
Description	Novus Biologicals Mouse GADD153/CHOP Antibody (9C8) - BSA Free (NB600-1335) is a monoclonal antibody validated for use in IHC, WB, ELISA, Flow, ICC/IF, Simple Western, IP and ChIP. Anti-GADD153/CHOP Antibody: Cited in 45 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Mouse
Gene ID	1649
Gene Symbol	DDIT3
Species	Human, Mouse, Rat, Primate
Reactivity Notes	Mouse reactivity reported in scientific literature (PMID:32828953). Human, mouse, rat and primate.
Marker	ER Stress Marker
Immunogen	Full length mouse CHOP/GADD153 [Swiss-Prot# P35639]

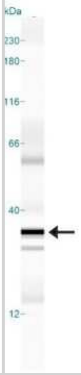
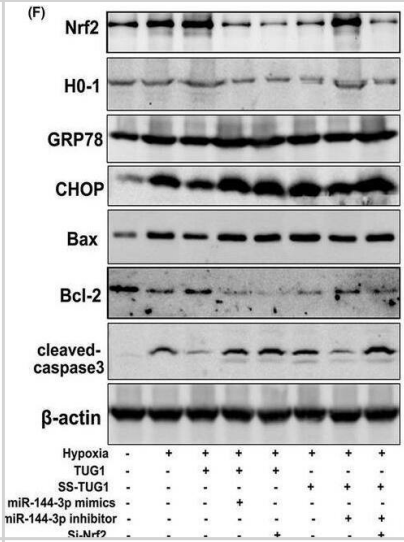
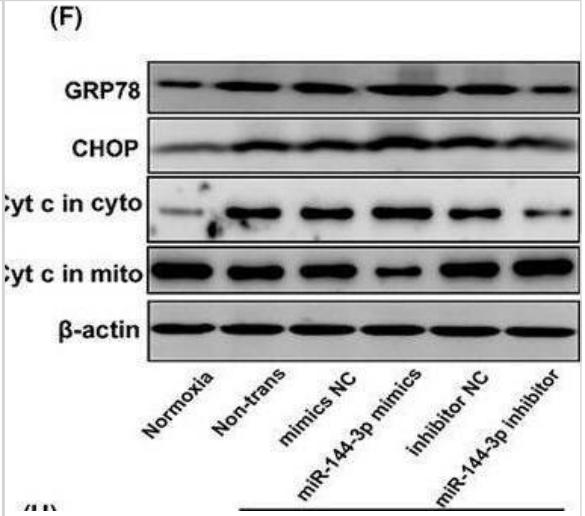
Product Application Details	
Applications	Western Blot, Simple Western, Immunohistochemistry-Paraffin, ELISA, Flow Cytometry, Gel Super Shift Assays, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunoprecipitation, Chromatin Immunoprecipitation (ChIP), Knockdown Validated
Recommended Dilutions	Western Blot, Simple Western 1:250, Flow Cytometry, ELISA, Immunohistochemistry 1:100, Immunocytochemistry/ Immunofluorescence 1:100, Immunoprecipitation 1:10 - 1:500, Immunohistochemistry-Paraffin 1:100, Gel Super Shift Assays, Chromatin Immunoprecipitation (ChIP), Knockdown Validated

Application Notes	Use in Knockdown Validated reported in scientific literature (PMID:32828953)In Western blot a band can be seen at approx. 29 Knockdown Validateda. Gel Super Shift Assays was reported in scientific literature. In Simple Western only 10 - 15 uL of the recommended dilution is used per data point. See Simple Western Antibody Database for Simple Western validation: Tested in HeLa lysate 1.0 mg/mL, separated by Size, antibody dilution of 1:250, apparent MW was 34 kDa. Separated by Size-Wes, Sally Sue/Peggy Sue. The observed molecular weight of the protein may vary from the listed predicted molecular weight due to post translational modifications, post translation cleavages, relative charges, and other experimental factors. Use in chromatin immunoprecipitation reported in scientific literature (PMID: 30962207). Use in ELISA reported in scientific literature (PMID: 29915575). Use in FLOW reported in scientific literature (PMID: 8650547).

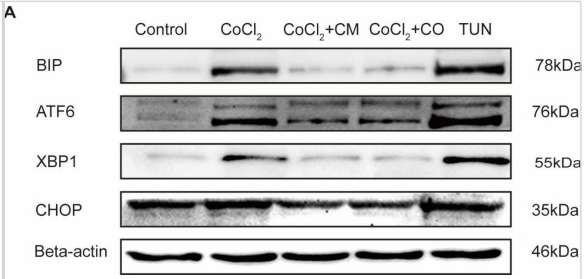
Images

Western Blot: GADD153/CHOP Antibody (9C8) [NB600-1335] - Ethanol feeding increases CHOP expression. Image from verified customer review.	
Immunohistochemistry-Paraffin: GADD153/CHOP Antibody (9C8) [NB600-1335] - FFPE tissue section of mouse brain using 1:100 dilution of GADD153/CHOP antibody. The signal was developed using HRP-DAB based detection method which followed counterstaining of the nuclei with hematoxylin. The antibody generated a cytoplasmic and nuclear staining of CHOP in various cell types in the tested section.	
Flow Cytometry: GADD153/CHOP Antibody (9C8) [NB600-1335] - An intracellular stain was performed on SK-MEL-28 cells with GADD153/CHOP Antibody (9C8) NB600-1335 (blue) and a matched isotype control MAB004 (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 2.5 ug/mL for 30 minutes at room temperature, followed by Mouse IgG (H+L) Cross-Adsorbed Secondary Antibody, Dylight 550 (84540, Thermo Fisher).	

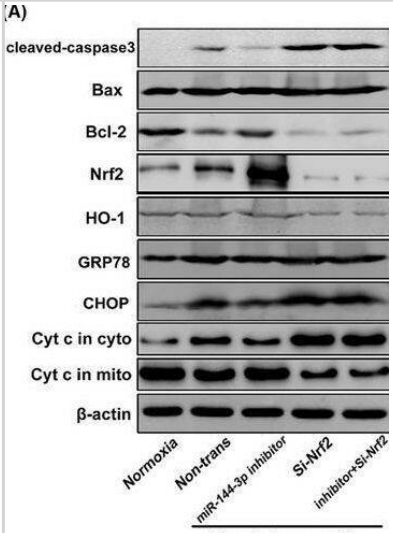
Western Blot: GADD153/CHOP Antibody (9C8) [NB600-1335] - GADD153/CHOP expression in HeLa cells treated with 2.5 ug/mL tunicamycin for 4 hours (Lane 1) and untreated (Lane 2).	
Western Blot: GADD153/CHOP Antibody (9C8) [NB600-1335] - Analysis of endogenous CHOP/GADD153 from primary human fibroblasts using NB600-1335. Lane 1: Untreated cells, Lane 2: Cells treated with tunicamycin for 10 hours.	
Western Blot: GADD153/CHOP Antibody (9C8) [NB600-1335] - Analysis of CHOP in rat heart tissue lysate. Image courtesy of product review submitted by Lee Hsiao-Wei.	
Immunohistochemistry-Paraffin: GADD153/CHOP Antibody (9C8) [NB600-1335] - FFPE tissue section of mouse brain using 1:100 dilution of GADD153/CHOP antibody. The signal was developed using HRP-DAB based detection method which followed counterstaining of the nuclei with hematoxylin. The antibody generated a cytoplasmic and nuclear staining of CHOP in various cell types in the tested section.	

Simple Western: GADD153/CHOP Antibody (9C8) [NB600-1335] - Image shows a specific band for CHOP/GADD153 in 1.0 mg/mL of HeLa lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.	
The TUG1□miR□144□3p□Nrf2 axis regulates H/R□induced cell apoptosis by adjusting oxidative stress and endoplasmic reticulum stress in vitro. A, B, TUNEL stain and quantitative analysis for H/R□injured TCMK cells with different transfections (n = 3). C–J, The expression levels of Nrf2, H0□1, CHOP, GRP78, Bax, Bcl□2 and cleaved□caspase3 in H/R□injured TCMK cells with different transfections were measured by Western blot analysis. Representative protein bands are shown in F, and the quantitative analysis of protein expression is shown in C□E, G□J (n = 3). K, L, The levels of SOD and MDA in different transfection groups (n = 3). All data are expressed as the mean +/- SD; data comparisons between multiple groups were performed using one□way analysis of variance (ANOVA) with Tukey's post hoc test. *p < 0.05, **p < 0.01 Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/34547172), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	
MiR□144□3p regulates H/R□induced Nrf2□HO□1 signaling pathway activation, oxidative stress, mitochondria and endoplasmic reticulum functions in vitro. A–C, The expression levels of Nrf2 and HO□1 in TCMK cells transfected with miR□144□3p mimics or inhibitor after H/R treatment. Representative bands are shown in A, and the quantitative analysis of protein expression level is shown in B, C (n = 3). D, E, The SOD and MDA levels in cellular supernatant of TCMK cells transfected with miR□144□3p mimics or inhibitor after H/R treatment (n = 3). F–I, The expression levels of CHOP, GRP78 and Cytochrome C in TCMK cells transfected with miR□144□3p mimics or inhibitor after H/R treatment. Representative bands are shown in F, and the quantitative analysis of protein expression level is shown in G–I (n = 3). All data are expressed as the mean +/- SD; data comparisons between multiple groups were performed using one□way analysis of variance (ANOVA) with Tukey's post hoc test. *p < 0.05, **p < 0.01 Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/34547172), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	

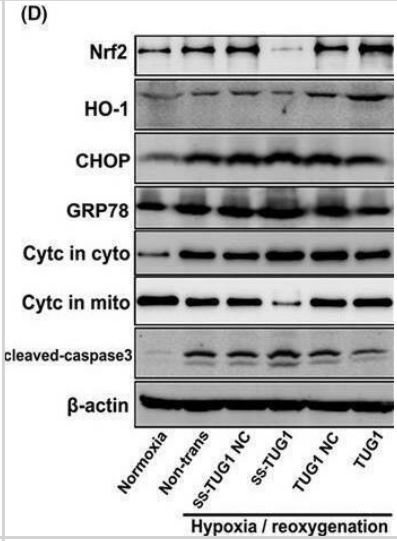
UPR Western blotting in vitro (A). (B) ASC-CO and ASC-CM reduced the expression of BIP under exposure to CoCl2, incubations with tunicamycin, and CoCl2 were used as controls (C) ASC-CO and ASC-CM reduced the protein expression of ATF6 under CoCl2, incubations with tunicamycin, and CoCl2 were used as controls (D) ASC-CO 57 and ASC-CM reduced the protein expression of XBP1, incubations with tunicamycin, and CoCl2. (E) The protein expression of CHOP and tunicamycin remained unchanged with ASC-CO and ASC-CM as compared to controls. (n = 3, ANOVA ns, not significant; * p ≤ 0.05, ** p ≤ 0.01, *** p ≤ 0.001). Image collected and cropped by CiteAb from the following open publication (https://www.mdpi.com/1422-0067/24/24/17197), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



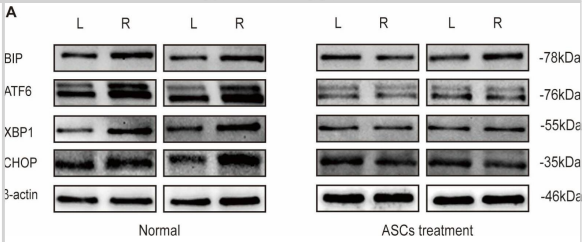
Knocking down Nrf2 reversed the miR□144□3p inhibitor□alleviated H/R□induced apoptosis, oxidative stress, mitochondrial damage and endoplasmic reticulum stress in vitro. A–c, F–K, The protein expression level of Nrf2, HO□1, cleaved□caspase3, Bax, Bcl□2, CHOP, GRP78 and Cytochrome C in H/R□injured TCMK cells transfected with miR□144□3p inhibitor or si□Nrf2. Representative bands are shown in A, and the quantitative analysis of protein expression is shown in B, C, F–K (n = 3). D, E, The SOD and MDA levels in cellular supernatants in H/R□injured TCMK cells transfected with miR□144□3p inhibitor or si□Nrf2 (n = 3). All data are expressed as the mean +/- SD; data comparisons between multiple groups were performed using one□way analysis of variance (ANOVA) with Tukey's post hoc test. *p < 0.05, **p < 0.01, NS, no significant difference Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/34547172), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

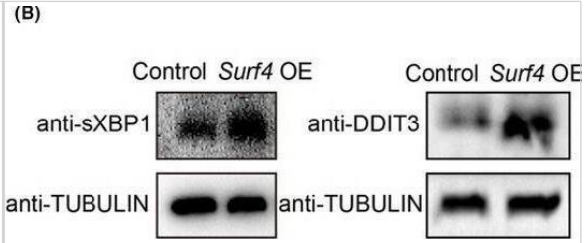
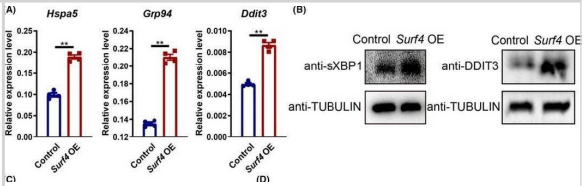


TUG1 plays an important role in H/R□induced cell apoptosis possibly through regulating the Nrf2□HO□1 pathway, oxidative stress, mitochondrial damage and endoplasmic reticulum stress via targeting miR□144□3p. A, The expression of miR□144□3p in TUG1□overexpressing or TUG1□knockdown TCMK cells detected by RT□qPCR (n = 3). B, C, The levels of SOD and MDA in cellular supernatant (n = 3). D–J, The relative expression levels of Nrf2, HO□1, GRP78, CHOP, Cyt C and cleaved□caspase3 were examined. Representative protein bands are shown in D, and the quantitative analysis of protein expression is shown in E□J (n = 3). All data are expressed as the mean +/- SD; data comparisons between multiple groups were performed using one□way analysis of variance (ANOVA) with Tukey's post hoc test. *p < 0.05, **p < 0.01 Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/34547172), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



ASCs lead to changes in UPR expression in vivo (A) The comparison of the left and right legs—with DLFA- of the two groups of mice are shown (B) Ratio between BIP expression between left and right leg with and without ASCs (C) Ratio of ATF6 expression between left and right leg with and without ASCs (D) Ratio of CHOP expression between left and right leg with and without ASCs (E) Ratio of XBP1 expression between left and right leg with and without ASCs (n = 3, ANOVA, * p ≤ 0.05, ** p ≤ 0.01). Image collected and cropped by CiteAb from the following open publication (https://www.mdpi.com/1422-0067/24/24/17197), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Response to ER Stress Mediates the Reprogramming Facilitation by Surf4. (A) The RNA level of ER stress□related genes on day 3 of reprogramming with or without exogenous Surf4. Relative expression of these genes relative to β□actin (n = 3, average +/-SEM). (B) The protein level of ER stress□related genes on day 3 of reprogramming with or without exogenous Surf4. (C) Kinetics of Oct4□GFP+colony formation with or without exogenous Surf4 and sXbp1□ΔDBD during reprogramming. (D) The number of Oct4□GFP+ colonies and the percentage of Oct4□GFP+ cells induced by OSKM plus Surf4 and sXbp1□ΔDBD. (E) Morphology of the primary colonies induced by OSKM plus Surf4 and sXbp1□ΔDBD. Scale bars, 1000 μm. Magnification: ×40. (F) AP staining of the primary iPS colonies. See also Figure S4 and Table S1 Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/34585448), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	
Response to ER Stress Mediates the Reprogramming Facilitation by Surf4. (A) The RNA level of ER stress□related genes on day 3 of reprogramming with or without exogenous Surf4. Relative expression of these genes relative to β□actin (n = 3, average +/-SEM). (B) The protein level of ER stress□related genes on day 3 of reprogramming with or without exogenous Surf4. (C) Kinetics of Oct4□GFP+colony formation with or without exogenous Surf4 and sXbp1□ΔDBD during reprogramming. (D) The number of Oct4□GFP+ colonies and the percentage of Oct4□GFP+ cells induced by OSKM plus Surf4 and sXbp1□ΔDBD. (E) Morphology of the primary colonies induced by OSKM plus Surf4 and sXbp1□ΔDBD. Scale bars, 1000 μm. Magnification: ×40. (F) AP staining of the primary iPS colonies. See also Figure S4 and Table S1 Image collected and cropped by CiteAb from the following open publication (https://pubmed.ncbi.nlm.nih.gov/34585448), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	

Publications

Ji E, Yeou S, Kang S et al. A novel role of liquid plasma (LP) induced RONS triggers the endoplasmic reticulum stress response and is associated with GSDME-mediated pyroptosis in anaplastic thyroid cancer Cell communication and signaling : CCS 2025-10-02 [PMID: 41039578]

M Navas-Madr, E Castelblan, M Camacho, M Consegal, A Ramirez-Mo, MR Sarrias, P Perez, N Alonso, M Galán, D Mauricio Role of the Scavenger Receptor CD36 in Accelerated Diabetic Atherosclerosis Int J Mol Sci, 2020-10-05;21 (19):. 2020-10-05 [PMID: 33028031] (Western Blot, Mouse)

Gatz C, Hathazi D, M□nchberg U et al. Identification of Cellular Pathogenicity Markers for SIL1 Mutations Linked to Marinesco-Sj□gren Syndrome Frontiers in Neurology 2019-06-14 [PMID: 31258504] (Western Blot, Mouse)

Chueh, KS;Juan, TJ;Lu, JH;Wu, BN;Lin, RJ;Mao, JW;Lin, HY;Chuang, SM;Chang, CY;Shen, MC;Sun, TW;Juan, YS; Low-Intensity Extracorporeal Shock Wave Therapy Ameliorates Detrusor Hyperactivity with Impaired Contractility via Transient Potential Vanilloid Channels: A Rat Model for Ovarian Hormone Deficiency International journal of molecular sciences 2024-04-30 [PMID: 38732143]

Lind□n M, Vannas C, □sterlund T et al. FET fusion oncoproteins interact with BRD4 and SWI/SNF chromatin remodelling complex subtypes in sarcoma Molecular Oncology 2022-07-01 [PMID: 35182012] (Western Blot)

Michael Keese, Jiaxing Zheng, Kaixuan Yan, Karen Bieback, Benito A Yard, Prama Pallavi, Christoph Reissfelder, Mark Andreas Kluth, Martin Sigl, Vugar Yugublu Adipose-Derived Mesenchymal Stem Cells Protect Endothelial Cells from Hypoxic Injury by Suppressing Terminal UPR In Vivo and In Vitro. International journal of molecular sciences 2023-12-25 [PMID: 38139026]

VJT Lin, J Hu, A Zolekar, MR Salick, P Mittal, JT Bird, P Hoffmann, A Kaykas, SD Byrum, YC Wang Deficiency of N-glycanase 1 perturbs neurogenesis and cerebral development modeled by human organoids Cell Death & Disease, 2022-03-24;13(3):262. 2022-03-24 [PMID: 35322011]

Mekhael O, Revill SD, Hayat AI et al. Myeloid-specific deletion of activating transcription factor 6 alpha increases CD11b+ macrophage subpopulations and aggravates lung fibrosis Immunology and cell biology 2023-03-02 [PMID: 36862017] (ICC/IF, Mouse)

Chandrasekaran R, Bruno SR, Mark ZF et al. Mitoquinone mesylate attenuates pathologic features of lean and obese allergic asthma in mice American journal of physiology. Lung cellular and molecular physiology 2022-12-13 [PMID: 36511516] (WB, Mouse)

Details:
Dilutions: 1:500

Preston AJ The Cancer Protective Properties of an Elephant TP53 Retrogene Thesis 2022-01-01

Dolatabadi S, Jonasson E, Andersson L Et al. FUS-DDIT3 Fusion Oncoprotein Expression Affects JAK-STAT Signaling in Myxoid Liposarcoma Front Oncol 2022-02-21 [PMID: 35186752] (IP, Human)

Details:
Citation using the Biotin version of this antibody.

Wu L, He S, Ye W Et al. Surf4 facilitates reprogramming by activating the cellular response to endoplasmic reticulum stress Cell proliferation 2021-11-01 [PMID: 34585448] (WB, Mouse)

More publications at http://www.novusbio.com/NB600-1335

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Products Related to NB600-1335

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]
NBP1-43317-0.5mg	Mouse IgG2b Kappa Light Chain Isotype Control (MG2b)

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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