Product Datasheet

p53 Antibody (Pab DO-1) - BSA Free NBP2-50538

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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NBP2-50538

p53 Antibody (Pab DO-1) - 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	Pab DO-1
Preservative	0.02% Sodium Azide
Isotype	IgG2a
Purity	Protein A purified
Buffer	PBS
Target Molecular Weight	53 kDa
Product Description	
Host	Mouse
Gene ID	7157
Gene Symbol	TP53
Species	Human
Specificity/Sensitivity	DO-1 recognises wild-type and mutant p53. DO-1 recognises three of the p53 isoforms (p53, p53 beta, p53 gamma).
Immunogen	Recombinant human wild type p53 protein expressed in E.coli
Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunoprecipitation, Chromatin Immunoprecipitation (ChIP)
Recommended Dilutions	Western Blot 1:100 - 1:2000, Immunohistochemistry 1:10 - 1:500, Immunocytochemistry/ Immunofluorescence, Immunoprecipitation 1:10 - 1:500, Chromatin Immunoprecipitation (ChIP) 1:10-1:500
Application Notes	Positive control(s): MDA-MB-231 cell line.

Images

Western Blot: p53 Antibody (Pab DO-1) [NBP2-50538] - B) Western Blot analyses of RPMI-8402 and NALM-6 cell lines treated for 24 h with AZD-1775 (185 nM) and PF-00477736 (25 and 250 nM respectively). B-actin was used for loading normalization. For relative quantification of each protein see Figure S3A and for whole western blot images see Figure S6. Image collected and cropped by CiteAb from the following publication (https://www.mdpi.com/2072-6694/11/11/1654) licensed under a CC-BY license.



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А. Western Blot: p53 Antibody (Pab DO-1) - BSA Free [NBP2-50538] -MCF-7 DCQ reduces HIF-1α through different mechanisms in MCF-7 & MDA-Hypoxia MB-231. (A) MCF-7 cells were transfected with siRNA against p53 & ctrl DCQ siRNA (scrambled sequence) using lipofectamine 2000. After 24 hours, sip53 cells were treated with DCQ (5 μ M) for 6 hours under hypoxia. Whole Ctrl siRNA cell lysates were prepared, & blots were probed against indicated antibodies. (B) MCF-7 cells were transfected with siRNA against p53 & HIF-1a ctrl siRNA (scrambled sequence) using lipofectamine 2000. Transfected p53 cells were treated with DCQ (5 μ M) for 6 hours under hypoxia. The extent of DNA fragmentation was determined by TUNEL assay 24 hours p21 later using flow cytometry. One-way ANOVA was used to compare DCQ-GAPDH treated versus control & statistical significance of p < 0.05 is indicated by *. (C) Whole cell lysates were prepared after pretreating MCF-7 & MDA-MB-231 with the proteasome inhibitor MG132 (3 µM) then treated with DCQ, & blots were probed for HIF-1α. Results are from three independent experiments. (D) Whole cell lysates of MCF-7 were prepared after 6 hours of exposure to DCQ (5 µM) under normoxia or hypoxia, & blots were probed for p-AKT, mTOR, p-mTOR & GAPDH. Image collected & cropped by CiteAb from the following publication (https://molecular-cancer.biomedcentral.com/articles/10.1186/1476-4598 -13-12), licensed under a CC-BY license. Not internally tested by Novus Biologicals. MCF-7 MDA-MB-231 Western Blot: p53 Antibody (Pab DO-1) - BSA Free [NBP2-50538] -Α. DCQ induces DNA damage & apoptosis via reactive oxygen species. (A) Hypoxia Hypoxia Whole cell lysates of MCF-7 & MDA-MB-231 were prepared after 6 hours DCQ DCC of exposure to DCQ (5 µM) under normoxia or hypoxia, & blots were p-H2AX p-H2AX p53 probed for p-H2AX, p53, p-p53, p21, HIF-1α & GAPDH. Results are p53 p21 p-p53 representative of three independent experiments. (B) MDA-MB-231 & p21 GAPDH MCF-7 cells were pretreated with 1 mM Vitamin E or DTT for 2 hours GAPDH followed by 25 min incubation with 10 µM CM-H2DCFDA dye. Cells were washed with PBS & treated with DCQ for 1 hour under normoxia or hypoxia, after which cells were harvested & the amount of DCF fluorescence was analyzed by flow cytometry. Each percentage is the average ± SE of three independent experiments. (C) MDA-MB-231 & MCF-7 cells were pretreated with 1 mM Vitamin E or DTT for 2 hours followed by 6 hours treatment with DCQ under normoxia or hypoxia. After 24 hours, the extent of DNA fragmentation was determined by TUNEL assay & measured by flow cytometry. One-way ANOVA was used to compare DCQ-treated versus control & statistical significance of p < 0.05 is indicated by *. (D) Whole cell lysates of MCF-7 & MDA-MB-231 were prepared after 6 hours of exposure to DCQ (5 μM) under normoxia or hypoxia, & blots were probed for HIF-1a & GAPDH. Results are representative of three independent experiments. Image collected & cropped by CiteAb from the following publication (https://molecularcancer.biomedcentral.com/articles/10.1186/1476-4598-13-12), licensed

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Flow Cytometry: Mouse Monoclonal p53 Antibody (Pab DO-1) [NBP2-50538] - P53 expression in monocyte subset of Human PBMCs post IFNγ treatment. Image from a verified customer review. The customer used the Alexa Fluor® 647-conjugated version of NBP2-50538, which is listed under NBP2-50538AF647.



Publications

Burmistrov V, Saxena R, Pitushkin D et al. Adamantyl Isothiocyanates as Mutant p53 Rescuing Agents and Their Structure-Activity Relationships Journal of medicinal chemistry 2021-05-27 [PMID: 33961435]

Ghattass K, El-Sitt S, Zibara K et al. The quinoxaline di-N-oxide DCQ blocks breast cancer metastasis in vitro and in vivo by targeting the hypoxia inducible factor-1 pathway. Mol Cancer 2014-01-24 [PMID: 24461075] (WB, Human)

Ghelli Luserna Di RorA, Bocconcelli, Ferrari et al. Synergism Through WEE1 and CHK1 Inhibition in Acute Lymphoblastic Leukemia Cancers 2019-10-25 [PMID: 31717700] (WB, Human)





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Products Related to NBP2-50538

HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-96778	Mouse IgG2a Isotype Control (M2A)
NBP2-56234PEP	p53 Recombinant Protein Antigen

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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