Product Datasheet

p14ARF/CDKN2A Antibody - BSA Free NB200-111

Unit Size: 0.1 ml

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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NB200-111

p14ARF/CDKN2A Antibody - BSA Free

Product Information	
Unit Size	0.1 ml
Concentration	1.0 mg/ml
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS
Product Description	
Host	Rabbit
Gene ID	1029
Gene Symbol	CDKN2A
Species	Human, Mouse
Reactivity Notes	Human and mouse reactivity reported in scientific literature.
Immunogen	A synthetic peptide made to a portion of human p14ARF (between residues 50-150). [Swiss-Prot# Q8N726]
Product Application Details	
Applications	Western Blot, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry- Paraffin, Immunoprecipitation, Knockdown Validated
Recommended Dilutions	Western Blot reported in scientific literature (PMID 21636682), Flow Cytometry 1:400, Immunohistochemistry 1:10-1:500. Use reported in scientific literature (PMID 18505964), Immunocytochemistry/ Immunofluorescence reported in scientific literature (PMID 25071014), Immunoprecipitation reported in scientific literature (PMID 20699639), Immunohistochemistry-Paraffin 1:10-1:500, Immunohistochemistry-Frozen 1:10-1:500. Use reported by customer review, Knockdown Validated
Application Notes	This p14ARF antibody can be used for Western blotting, where a band is seen at ~16 kDa, representing p14ARF. Additional faint bands may be seen at ~32 and 47 kDa. In ICC/IF [PMID: 25071014], nuclear focal staining was observed in HeLa cells.

Images

Knockdown Validated: p14ARF/CDKN2A Antibody [NB200-111] -Inhibition of AKT decreases p53mut stability. T24 cells were transfected with non-targeting control, AKT1, or p14ARF siRNA. Cells were treated with NCS348884 (4 i1/4M), Nutlin3A (5 i1/4M) or DMSO as indicated. Whole cell lysates were probed with the indicated antibodies. Image collected and cropped by Citeab from the following publication (AKT regulates NPM dependent ARF localization and p53mut stability in tumors. *Oncotarget* (2014)) licensed under a CC-BY license.













Publications

Xiong H, Yang Y, Yang K et al. Loss of the clock gene PER2 is associated with cancer development and altered expression of important tumor-related genes in oral cancer. Int J Oncol 2018-01-01 [PMID: 29115399] (Human)

Crawford Parks TE, Marcellus KA, Langill J et al. Novel Roles for Staufen1 in Embryonal and Alveolar Rhabdomyosarcoma via c-myc-dependent and -independent events. Sci Rep. 2017-02-17 [PMID: 28211476] (WB, Human)

Greiner T. Who chooses the leaders of UN organisations? Lancet 2010-03-27 [PMID: 20346814] (Human)

Magro PG, Russo AJ, Li WW et al. p14ARF expression increases dihydrofolate reductase degradation and paradoxically results in resistance to folate antagonists in cells with nonfunctional p53. Cancer Res 2004-06-15 [PMID: 15205349] (Human)

Hamilton Garth, Abraham Aswin G, Morton Jennifer et al. AKT regulates NPM dependent ARF localization and p53mut stability in tumors. Oncotarget. 2014-08-15 [PMID: 25071014] (ICC/IF)

Ghosh M, Ryan RO. Curcumin homing to the nucleolus: mechanism for initiation of an apoptotic program. J Nutr. Biochem. 2014-08-01 [PMID: 25172633] (WB, Human)

Williams RT, Barnhill LM, Kuo HH et al. Chimeras of p14ARF and p16: Functional Hybrids with the Ability to Arrest Growth. PLoS ONE 2014-02-07 [PMID: 24505435] (WB, Human)

Chen D, Shan J, Zhu WG, Qin J, Gu Wet al. Transcription-independent ARF regulation in oncogenic stress-mediated p53 responses. Nature 2010-03-25 [PMID: 20208519] (IP, Human)

Chen D, Yoon JB, Gu W. Reactivating the ARF-p53 axis in AML cells by targeting ULF. Cell Cycle 2010-08-01 [PMID: 20699639] (IP, Human)

Muniz V, Barnes JM, Paliwal S et al. The ARF tumor suppressor inhibits tumor cell colonization independent of p53 in a novel mouse model of pancreatic ductal adenocarcinoma metastasis. Mol Cancer Res 9(7):867-77. 2011-07-01 [PMID: 21636682] (WB, Mouse)

Mascaux, C et al. The role of NPM, p14arf and MDM2 in precursors of bronchial squamous cell carcinoma. Eur Respir J 32(3):678-86. 2008-09-01 [PMID: 18480108] (IF/IHC, Human)

Chio II, Sasaki M, Ghazarian D, Moreno J, Done S, Ueda T, Inoue S, Chang YL, Chen NJ, Mak TW. TRADD contributes to tumour suppression by regulating ULF-dependent p19(Arf) ubiquitylation. Nat Cell Biol;14(6):625-33. 2012-05-06 [PMID: 22561347] (WB, Human, Mouse)

More publications at http://www.novusbio.com/NB200-111



Procedures

Protocol specific for p14ARF Antibody (NB200-111)

Western Blot Procedure

1) Lyse HeLa or BT549 cells in Laemli buffer (2% SDS, 62.5 mM Tris pH 6.8, 10% glycerol, 5% 2-mercaptoethanol).

2) Boil the lysate for 5 minutes.

3) Load 25 ug of total cell extract, per lane, in a 15% SDS-PAGE minigel.

4) Transfer protein to PVDF membrane in 40 mM Tris base, 20 mM NaAcetate, 2 mM EDTA pH 7.4, 0.05% SDS, 20% methanol for 1 hour at 4 degrees C.

5) Rinse membrane in PBS-T and then block membrane in 5% nonfat dry milk/PBS-T (0.01M phosphate, 0.0027M KCI, 0.137M NaCI pH 7.4, 0.1% Tween-20) for 1 hour at room temperature or overnight at 4 degrees C.

6) Incubate membrane overnight at 4 degrees C with properly diluted NB200-111 (see data sheet) in PBS, 0.2% Tween-20, 5% nonfat dry milk.

7) Rinse the membrane 2X with 40 ml PBS-T. Wash membrane at room temperature, with 40 ml of PBS-T, 1X for 15 minutes and 2X for 5 minutes, each.

8) Incubate membrane with HRP conjugated anti-rabbit, diluted in PBS-T with 5% nonfat dry milk, for 1 hour at room temperature.

9) Wash membrane at room temperature, with 40 ml of PBS-T, 1X for 15 minutes and 4X for 5 minutes, each.

10) Develop with ECL reagents (Amersham) and autoradiography. Expose for 1+ minutes. For BT549 cells, 1 minute exposure is needed. For HeLa cells, additional exposure time may be required. In addition, a stronger ECL (Pierce) may be necessary.

NOTE: HeLa whole cell extracts (NB800-PC1) were used as a positive control for this antibody.







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Products Related to NB200-111

HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control
NB200-111B	p14ARF/CDKN2A Antibody [Biotin]

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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