# **Product Datasheet**

# CIP2A Antibody NB100-74663

Unit Size: 0.1 ml

Store at 4C. Do not freeze.

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#### NB100-74663

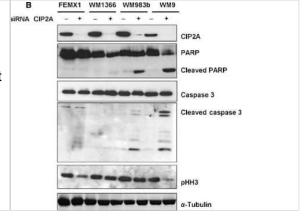
CIP2A Antibody

Oil 2A Antibody	
Product Information	
Unit Size	0.1 ml
Concentration	0.25 mg/ml
Storage	Store at 4C. Do not freeze.
Clonality	Polyclonal
Preservative	0.09% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	TBS and 0.1% BSA
Product Description	
Host	Rabbit
Gene ID	57650
Gene Symbol	CIP2A
Species	Human, Mouse, Rat
Reactivity Notes	Mouse reactivity reported in scientific literature (PMID: 20447748). Rat reactivity reported in scientific literature (PMID: 29464081).
Immunogen	The immunogen recognized by this antibody maps to a region between residue 550 and 600 of human cancerous inhibitor of PP2A using the numbering given in entry NP_065941.1 (GeneID 57650).
Product Application Details	
Applications	Western Blot, Electron Microscopy, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 1:100-1:2000, Flow Cytometry 1:10-1:1000, Immunohistochemistry 1:100-1:500, Immunocytochemistry/ Immunofluorescence 1:50 - 1:500,

# Applications Western Blot, Electron Microscopy, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin Western Blot 1:100-1:2000, Flow Cytometry 1:10-1:1000, Immunohistochemistry 1:100-1:500, Immunocytochemistry/ Immunofluorescence 1:50 - 1:500, Immunohistochemistry-Paraffin 1:100-1:500, Electron Microscopy Application Notes Epitope exposure with citrate buffer exposure is recommended to enhance staining. Although not tested this antibody may be useful in frozen sections. WB was reported in (PMID: 22328001). Use in Flow Cytometry reported in (PMID: 20447748). Use in Electron Microscopy reported in scientific literature (PMID: 20447748).

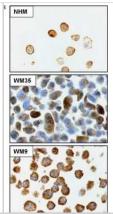
# **Images**

Western Blot: CIP2A Antibody [NB100-74663] - CIP2A downregulation reduces proliferation and induces apoptosis in melanoma cells. Immunoblot analysis showing reduction in cancerous inhibitor of protein phosphatase 2A protein levels 48 h post siRNA transfection and effects on proliferation and apoptosis markers. The figure is representative of at last three independent biological experiments. Image collected and cropped by CiteAb from the following publication (https://doi.wiley.com/10.1002/cam4.425), licensed under a CC-BY license.

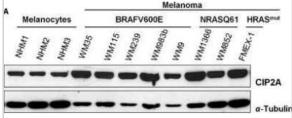




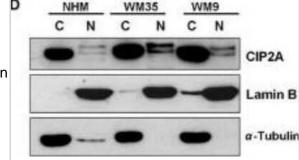
Immunohistochemistry: CIP2A Antibody [NB100-74663] - Characterization of CIP2A expression in a panel of normal human melanocytes (NHM) and melanoma cell lines. Cytoplasmic and nuclear expression of CIP2A in normal melanocytes, primary and metastatic melanoma cell lines assessed by immunohistochemical staining. CIP2A = cancerous inhibitor of protein phosphatase 2A. Image collected and cropped by CiteAb from the following publication (https://doi.wiley.com/10.1002/cam4.425), licensed under a CC-BY license.



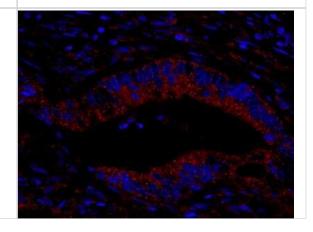
Western Blot: CIP2A Antibody [NB100-74663] - Characterization of CIP2A expression in a panel of normal human melanocytes (NHM) and melanoma cell lines. Immunoblot analysis of protein expression levels of CIP2A. Image collected and cropped by CiteAb from the following publication (https://doi.wiley.com/10.1002/cam4.425), licensed under a CC-BY license.



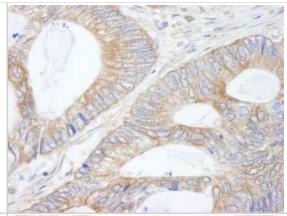
Western Blot: CIP2A Antibody [NB100-74663] - Characterization of CIP2A expression in a panel of normal human melanocytes (NHM) and melanoma cell lines. Cytoplasmic and nuclear expression of CIP2A in normal melanocytes, primary and metastatic melanoma cell lines assessed by immunoblot analysis. CIP2A = cancerous inhibitor of protein phosphatase 2A. Image collected and cropped by CiteAb from the following publication (https://doi.wiley.com/10.1002/cam4.425), licensed under a CC-BY license.



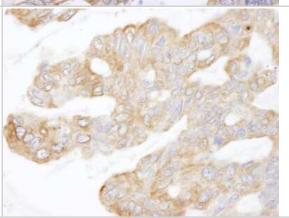
Immunohistochemistry: CIP2A Antibody [NB100-74663] - Section of human colon carcinoma. Antibody: Affinity purified rabbit anti-CIP2A used at a dilution of 1:100. Detection: Red-fluorescent goat anti-rabbit IgG highly cross-adsorbed Antibody used at a dilution of 1:100.



Immunohistochemistry-Paraffin: CIP2A Antibody [NB100-74663] - Section of human colon carcinoma. Antibody: Affinity purified rabbit anti-CIP2A used at a dilution of 1:250. Detection: DAB



Immunohistochemistry-Paraffin: CIP2A Antibody [NB100-74663] - Section of human ovarian carcinoma. Antibody: Affinity purified rabbit anti-CIP2A used at a dilution of 1:250. Detection: DAB

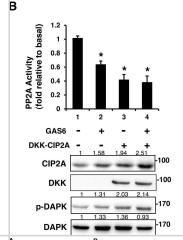


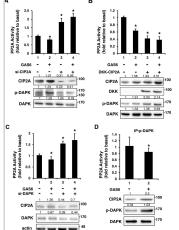
Western Blot: CIP2A Antibody [NB100-74663] - CIP2A is an inhibitor of PP2A-mediated DAPK dephosphorylationRSC96 cells were transfected with control, CIP2A siRNA (A), DKK-CIP2A (B), or DAPK siRNA (C) for 48 h & then exposed to GAS6 (100 ng/ml) for 30 min. PP2A activity & immunoblotting evaluations of DKK, CIP2A, pDAPK, & DAPK were performed. (D) RSC96 cells were incubated with GAS6 (100 ng/ml) for 30 min & co-immunoprecipitation between CIP2A, pDAPK & PP2A was evaluated. Immunoprecipitated PP2A activity was measured. Data are the mean  $\pm$  SD, & n = 3 for each time point. \* p < 0.05, \*\* p < 0.01, vs. control. Image collected & cropped by CiteAb from the following publication

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Western Blot: CIP2A Antibody [NB100-74663] - CIP2A is an inhibitor of PP2A-mediated DAPK dephosphorylationRSC96 cells were transfected with control, CIP2A siRNA (A), DKK-CIP2A (B), or DAPK siRNA (C) for 48 h & then exposed to GAS6 (100 ng/ml) for 30 min. PP2A activity & immunoblotting evaluations of DKK, CIP2A, pDAPK, & DAPK were performed. (D) RSC96 cells were incubated with GAS6 (100 ng/ml) for 30 min & co-immunoprecipitation between CIP2A, pDAPK & PP2A was evaluated. Immunoprecipitated PP2A activity was measured. Data are the mean  $\pm$  SD, & n = 3 for each time point. \* p < 0.05, \*\* p < 0.01, vs. control. Image collected & cropped by CiteAb from the following publication

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Western Blot: CIP2A Antibody [NB100-74663] - GAS6 increases the amount of both CIP2A & p-DAPK in RSC96 cells(A) RSC96 cells were incubated with GAS6 (100 ng/ml), & immunoblotting evaluations of CIP2A & p-DAPK expression were performed. The lower panel shows the intensity during basal conditions from the scanned imaged (upper panel). (B) RSC96 cells incubated with & without GAS6 (100 ng/ml) for 30 min & analysed by immunofluorescence. (C) Immunohistochemistry images demonstrated that CIP2A expression levels were higher than sham levels at 14 days & 28 days in the cavernous nerve after BCNI. Image collected & cropped by CiteAb from the following publication (https://www.oncotarget.com/lookup/doi/10.18632/oncotarget.23978), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

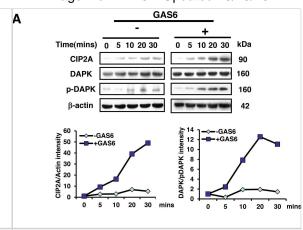
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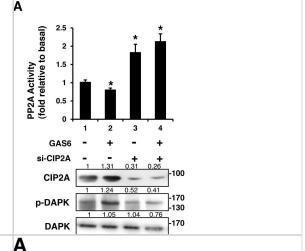
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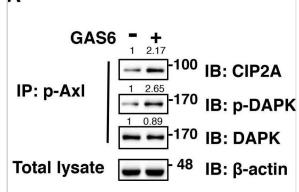
Western Blot: CIP2A Antibody [NB100-74663] - GAS6 triggers p-Axl, p-DAPK & CIP2A to form a protein complex in RSC96 cells(A-B) Co-immunoprecipitation between p-Axl, p-DAPK & CIP2A with GAS6 stimulation for 30 min in RSC96 cells. Total lysate indicates 1/10 input in each experiment. The relative quantification of protein expression was normalized with respect to β-actin expression. (C) Immunofluorescence image demonstrating co-localized CIP2A & p-Axl & co-localized p-Axl & p-DAPK (D) after GAS6 stimulation for 30 min in RSC96 cells. Image collected & cropped by CiteAb from the following publication (https://www.oncotarget.com/lookup/doi/10.18632/oncotarget.23978), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

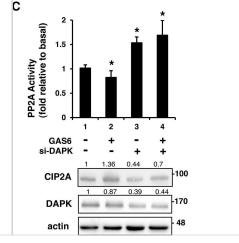
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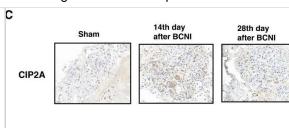
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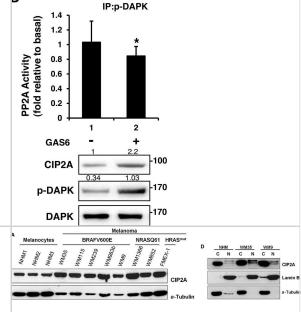
Western Blot: CIP2A Antibody [NB100-74663] - Characterization of CIP2A expression in a panel of normal human melanocytes (NHM) & melanoma cell lines. (A) Immunoblot analysis & (B) quantification of protein expression levels of CIP2A (C) CIP2A mRNA expression measured by qRT-PCR. NHM1 line was used as calibrator. (D) Cytoplasmic & nuclear expression of CIP2A in normal melanocytes, primary & metastatic melanoma cell lines assessed by immunoblot analysis & (E) by immunohistochemical staining. CIP2A, cancerous inhibitor of protein phosphatase 2A. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/25663244), licensed under a CC-BY

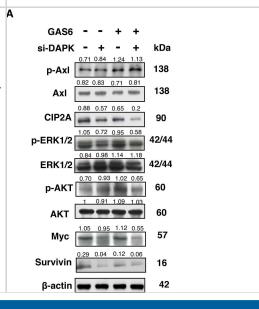
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Western Blot: CIP2A Antibody [NB100-74663] - GAS6 triggered Schwann cell proliferation primarily through CIP2A & DAPK(A) RSC96 cells were transfected with either control or DAPK siRNA for 48 h & then exposed to GAS6 (100 ng/ml) for 30 min. Immunoblotting evaluations of pAxl, Axl, CIP2A, DAPK, pERK1/2, ERK1/2, pAKT, AKT, Myc & Survivin. (B) RSC96 cells were transfected with either control or CIP2A siRNA for 48 h & then exposed to GAS6 (100 ng/ml) for 30 min. Immunoblotting evaluations of pAxl, Axl, DAPK, pDAPK, pERK1/2, ERK1/2, pAKT, AKT, Myc & Survivin. (C) DAPK or CIP2A was knocked down for 48 h then RSC96 cells were incubated with GAS6 (100 ng/ml) at the indicated hours. Cell viability was analysed via the WST-1 assay. Data are the mean ± SD, & n = 3 for each time point. \* p < 0.05, \*\* p < 0.01 vs. scramble. Image collected & cropped by CiteAb from the following publication

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#### **Publications**

Chuang H, Pan J, Cai Y et al. Reciprocal regulation of CIP2A and AR expression in prostate cancer cells Research Square 2022-07-25 [PMID: 36098827]

Chen YL, Tsai YT, Chao TT, Wu YN. DAPK and CIP2A are involved in GAS6/AXL-mediated Schwann cell proliferation in a rat model of bilateral cavernous nerve injury. Oncotarget. 2018-01-19 [PMID: 29464081] (IHC-P, Rat)

Li Y, Cai X, Chen B et al. Overexpression of epithelial cell transforming 2 protein in colorectal carcinoma predicts a poor prognosis Experimental and Therapeutic Medicine 2017-09-19 [PMID: 29109759] (Human)

Chen KF, Yen CC, Lin JK et al. Cancerous inhibitor of protein phosphatase 2A (CIP2A) is an independent prognostic marker in wild-type KRAS metastatic colorectal cancer after colorectal liver metastasectomy BMC Cancer 2015-04-21 [PMID: 25896895] (IHC-P, WB, Human)

Wang Hsei-Wei, Yang Shung-Haur, Huang Guan-Da et al. Temsirolimus enhances the efficacy of cetuximab in colon cancer through a CIP2A-dependent mechanism. J Cancer Res Clin Oncol. 2014-02-04 [PMID: 24493623]

Florenes VA, Emilsen E, Dong HP et al. Cellular localization of CIP2A determines its prognostic impact in superficial spreading and nodular melanoma Cancer Med. 2015-02-07 [PMID: 25663244] (IHC-P, Human)

Kerosuo L, Fox H, Perala N et al. CIP2A increases self-renewal and is linked to Myc in neural progenitor cells. Differentiation. 2010-07-01 [PMID: 20447748] (FLOW, IHC-P, Mouse)

He H, Wu G, Li W et al. CIP2A is highly expressed in hepatocellular carcinoma and predicts poor prognosis. Diagn Mol Pathol. 2012-09-01 [PMID: 22847158] (IHC-P, Human)

Bockelman C. Role of CIP2A in carcinogenesis Thesis University of Helsinki, Haartman Institute, Patologia URN:ISBN:978-952-10-7579-7 . 2012-02-10 (IHC-P, Human, Mouse)

Vaarala MH, Vaisanen MR, Ristimaki A. CIP2A expression is increased in prostate cancer J Exp Clin Cancer Res 2010-10-21 [PMID: 20964854] (IF/IHC, Human)

Teng HW, Yang SH, Lin JK, Chen WS, Lin TC, Jiang JK, Yen CC, Li AF, Chen PC, Lan YT, Lin CC, Hsu YN, Wang HW, Chen KF. CIP2A Is a Predictor of Poor Prognosis in Colon Cancer. J Gastrointest Surg;16(5):1037-47. 2012-05-01 [PMID: 22328001] (IF/IHC, WB, Human)

Bockelman C, Lassus H, Hemmes A et al. Prognostic role of CIP2A expression in serous ovarian cancer. British Journal of Cancer. 2011-09-06 [PMID: 21897396]





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## **General Contact Information**

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techne.com

Orders: nb-customerservice@bio-techne.com

General: novus@novusbio.com

# **Products Related to NB100-74663**

NBL1-12266 CIP2A Overexpression Lysate

HAF008 Goat anti-Rabbit IgG Secondary Antibody [HRP]

NB7160 Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]

NBP2-24891 Rabbit 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.

For more information on our 100% guarantee, please visit www.novusbio.com/guarantee

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