

Product Datasheet

PKC alpha Antibody (MC5) - BSA Free NB600-201

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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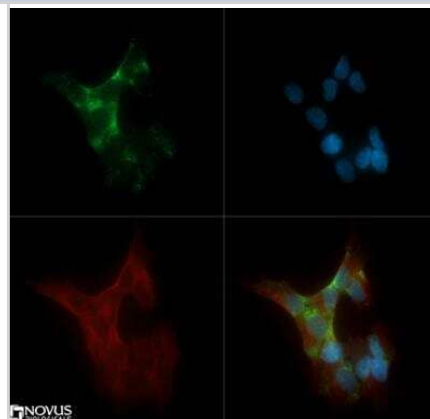
NB600-201

PKC alpha Antibody (MC5) - BSA Free

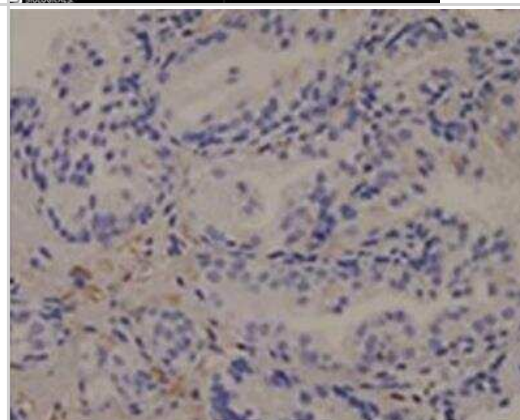
Product Information	
Unit Size	0.1 ml
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	MC5
Preservative	0.05% Sodium Azide
Isotype	IgG2a Kappa
Purity	Protein A purified
Buffer	Tris-Glycine and 0.15 M NaCl
Product Description	
Description	Novus Biologicals Mouse PKC alpha Antibody (MC5) - BSA Free (NB600-201) is a monoclonal antibody validated for use in IHC, WB, ELISA, Flow, ICC/IF and IP. Anti-PKC alpha Antibody: Cited in 29 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Mouse
Gene ID	5578
Gene Symbol	PRKCA
Species	Human, Mouse, Rat, Porcine, Bovine, Canine, Chicken, Fish, Baboon, Monkey, Rabbit, Sheep, Zebrafish
Reactivity Notes	Use in Monkey reported in scientific literature (PMID:35024589) Use in Baboon reported in scientific literature (PMID:34314739) Zebrafish reactivity reported in scientific literature (PMID: 31273575)..
Specificity/Sensitivity	This antibody is capable of detecting PKC beta as well.
Immunogen	Purified bovine brain Protein Kinase C
Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, ELISA, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunoprecipitation, Radioimmunoassay
Recommended Dilutions	Western Blot 1:1000, Flow Cytometry 1:10-1:1000, ELISA 1:100-1:2000, Immunohistochemistry 1:200-1:500, Immunocytochemistry/ Immunofluorescence 1:100-1:500, Immunoprecipitation 1:10-1:100, Immunohistochemistry-Paraffin 1:200-1:500, Immunohistochemistry-Frozen 1:200-1:500, Radioimmunoassay
Application Notes	This PKC alpha Antibody (MC5) is useful for Western blot, ELISA, Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunohistochemistry on frozen and paraffin-embedded sections, Immunoprecipitation and Radioimmunoassay. In WB a band can be seen at ~75 kDa representing PKC alpha.

Images

Immunocytochemistry/Immunofluorescence: PKC alpha Antibody (MC5) [NB600-201] - PKC alpha (MC5) antibody was tested in SH-SY5Y cells with DyLight 488 (green). Nuclei and beta-tubulin were counterstained with DAPI (blue) and DyLight 550 (red).

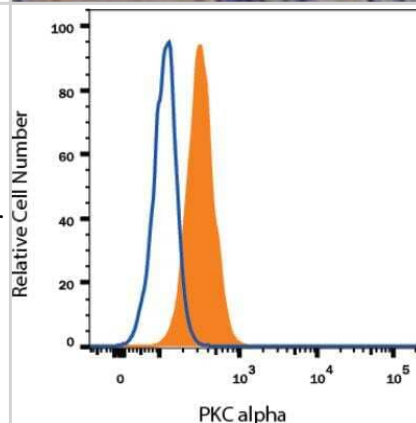


Immunohistochemistry-Paraffin: PKC alpha Antibody (MC5) [NB600-201] - PKC alpha detected in mouse prostate tissue using PKC alpha Antibody (MC5). IHC-P image submitted by a verified customer review.

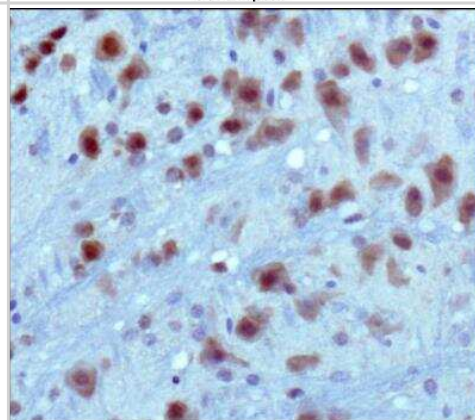


Flow Cytometry: PKC alpha Antibody (MC5) [NB600-201] - Detection of PKC alpha in Human HeLa Cell Line by Flow Cytometry. Human HeLa cell line was stained with Mouse Anti- PKC alpha Monoclonal Antibody (Catalog # NB600-201, filled histogram), or Mouse IgG2A isotype control (Catalog # MAB003, open histogram) followed by APC-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005).

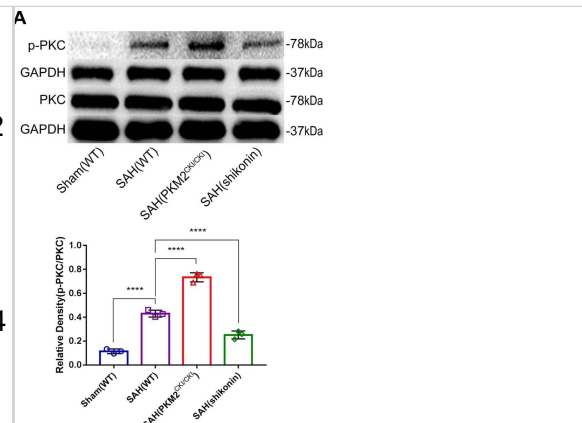
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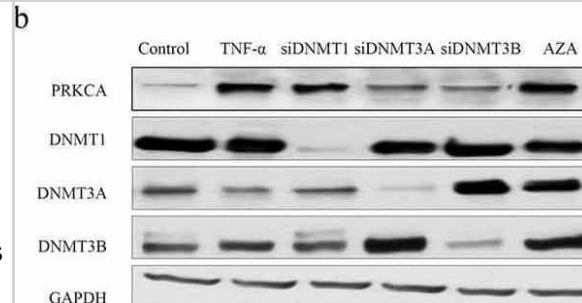
Immunohistochemistry-Paraffin: PKC alpha Antibody (MC5) [NB600-201] - IHC staining of PKC alpha in mouse brain using DAB with hematoxylin counterstain.



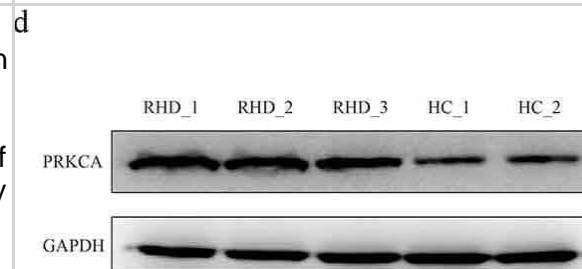
Expression of proteins downstream of PKM2 after SAH. A–D Western blotting and quantitative analysis of p-PKC, PKC, p-ERK and ERK. The following four kinds of mice were used for the in vivo study: WT sham mice and WT mice 24 h after SAH; PKM2CKI/CKI and Aldh1| 1-creERT2 mice 24 h after SAH; and WT mice 24 h after SAH. The cell grouping method was the same as that described in Sect. 3.6 (n = 3 per group); one-way ANOVA, *P < 0.05; **P < 0.01; ***P < 0.001; ****P < 0.0001 Image collected and cropped by CiteAb from the following open publication (<https://fluidsbarrierscns.biomedcentral.com/articles/10.1186/s12987-024-00550-8>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



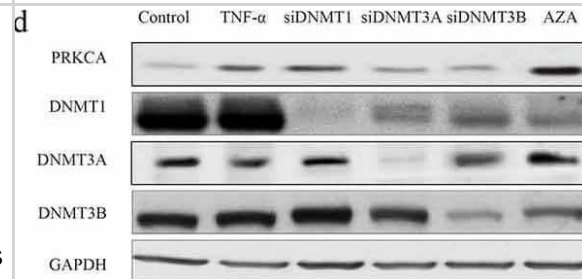
The effect of DNMTs on DNA methylation of PRKCA in human cardiomyocyte cells. (a) the mRNA and (b) protein of PRKCA in AC16 cells induced by TNF- α , DNMTs RNA interference and 5-azacytidine. (c) the mRNA and (d) protein of PRKCA in RL-14 cells induced by TNF- α , DNMTs RNA interference and 5-azacytidine. DNA methylation on 5' terminal of PRKCA (promoter, first exon and first intron) in (e) AC16 and (f) RL-14 cells induced by TNF- α , DNMTs RNA interference and 5-azacytidine. the given data from triplicate experiments was processed as mean +/- standard error and compared by student's t-test. No. 1 to 6 indicate six comparison with control group. 'FC': fold change; 'si': siRNA; 'AZA': 5-azacytidine Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/34482802>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



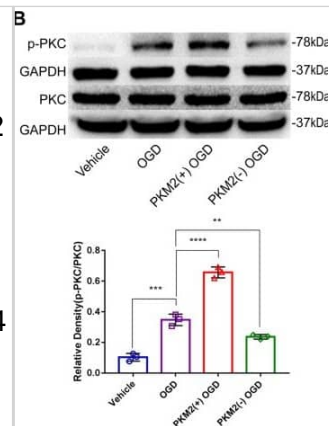
DNA methylation of PRKCA in mitral valve of RHD. (a) the overview of CpG loci distribution within human PRKCA gene. (b) DNA methylation on 5' terminal of PRKCA (promoter, first exon and first intron) in mitral valve of RHD by MeDIP-qPCR assay. (c) PRKCA transcription levels in mitral valve of RHD by qPCR assay. (d) PRKCA protein levels in mitral valve of RHD by WB assay. (e) PRKCA protein levels calculated by gray intensity analysis. (f) the correlation between DNA methylation and PRKCA transcription by pearson correlation analysis. the given data was processed as mean +/- standard error and compared between RHD and HC groups by student's t-test. 'RHD': rheumatic heart disease; 'HC': healthy control; 'FC': fold change Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/34482802>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



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Publications

Xie Z, Wang Q, Hu S. Coordination of PRKCA/PRKCA-AS1 interplay facilitates DNA methyltransferase 1 recruitment on DNA methylation to affect protein kinase C alpha transcription in mitral valve of rheumatic heart disease Bioengineered 2021-09-06 [PMID: 34482802] (Western Blot, Human)

Zhang L, Liu W, Wang HY et Al. The temporal progression of retinal degeneration and early-stage idebenone treatment in the Pde6b(rd1/rd1) mouse model of retinal dystrophy Sci Rep 2024-01-23 [PMID: 38263197]

Weng Y, Feng Y, Li Z et Al. Zfp260 choreographs the early stage osteo-lineage commitment of skeletal stem cells Nat Commun 2024-11-24 [PMID: 39582024]

Bernardo-Col□n A, Dong L, Abu-Asab M et al. Ablation of Pigment Epithelium-derived Factor Receptor (PEDF-R/Pnpla2) Causes Photoreceptor Degeneration Journal of lipid research 2023-03-17 [PMID: 36934843] (IHC-P, Mouse)

Details:

Dilution: 1:50

Ren J, Hu Z, Li Q et al. Temperature-induced embryonic diapause in chickens is mediated by PKC-NF-?B-IRF1 signaling BMC biology 2023-03-08 [PMID: 36882743] (Immunocytochemistry/ Immunofluorescence, Avian - Chicken)

Della Santina L, Yu A, Harris S, et al. Disassembly and Rewiring of a Mature Converging Excitatory Circuit Following Injury Cell Rep 2021-08-04 [PMID: 34348156]

Thomson B, Grannonico M, Liu F et Al. Angiopoietin-1 Knockout Mice as a Genetic Model of Open-Angle Glaucoma Transl Vis Sci Technol 2020-08-21 [PMID: 32818103]

Antoniali G, Dalla E, Mangiapane G et al. APE1 controls DICER1 expression in NSCLC through miR-33a and miR-130b Cellular and molecular life sciences : CMLS 2022-07-25 [PMID: 35876890] (WB)

Yamasaki S, Tu H, Matsuyama T et al. A Genetic modification that reduces ON-bipolar cells in hESC-derived retinas enhances functional integration after transplantation iScience 2022-01-01 [PMID: 35024589] (IHC-Fr, Monkey)

Matsuyama T, Tu HY, Sun J Et al. Genetically engineered stem cell-derived retinal grafts for improved retinal reconstruction after transplantation iScience 2021-08-20 [PMID: 34409267]

Chen Aw, Biggar K, Nygard K Et Al. IGFBP-1 hyperphosphorylation in response to nutrient deprivation is mediated by activation of protein kinase Calpha (PKCalpha) Molecular and cellular endocrinology 2021-07-24 [PMID: 34314739] (IHC-P, WB)

Grillo SL, McDevitt DS, Voas MG et al. Adenosine receptor expression in the adult zebrafish retina Purinergic Signal 2019-07-06 [PMID: 31273575] (IF/IHC, Zebrafish)

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HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB7539	Goat anti-Mouse IgG (H+L) Secondary Antibody [HRP]
NBP1-96981-0.5mg	Mouse IgG2a Kappa Isotype Control (M2AK)

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