

Product datasheet

Anti-Protein Kinase D2 antibody ab7281

★★★★★ 3 Abreviews 3 References 4 图像

概述

产品名称	Anti-Protein Kinase D2抗体
描述	兔多克隆抗体to Protein Kinase D2
经测试应用	适用于: WB, IHC-P, ICC/IF, IP
种属反应性	与反应: Mouse, Human
免疫原	Human protein kinase D2.
常规说明	

This antibody recognizes human protein kinase D2 (PKD2), a serine threonine protein kinase. PKD2 is widely expressed in human and murine tissues and exhibits strong homology to the serine threonine protein kinases PKD/PKCmicro and PKCnu. In contrast, it has a low degree of sequence homology to other members of the PKC family. PKD2 is activated by phorbol esters and a variety of growth factors.

性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
存储溶液	Preservative: 0.02% Sodium Azide Constituents: PBS
纯度	Immunogen affinity purified
Primary antibody说明	This antibody recognizes human protein kinase D2 (PKD2), a serine threonine protein kinase. PKD2 is widely expressed in human and murine tissues and exhibits strong homology to the serine threonine protein kinases PKD/PKCmicro and PKCnu. In contrast, it has a low degree of sequence homology to other members of the PKC family. PKD2 is activated by phorbol esters and a variety of growth factors.
克隆	多克隆
同种型	IgG

应用

Our [Abpromise guarantee](#) covers the use of **ab7281** in the following tested applications.

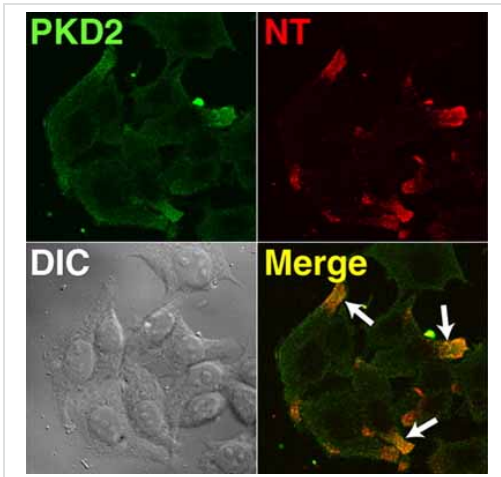
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用	Ab评论	说明
WB	★★★★★	1/500 - 1/1000. Detects a band of approximately 105 kDa.
IHC-P	★★★★★	Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
IP		Use a concentration of 5 µg/ml.

靶标

功能	Converts transient diacylglycerol (DAG) signals into prolonged physiological effects, downstream of PKC. Involved in resistance to oxidative stress.
组织特异性	Widely expressed.
序列相似性	Belongs to the protein kinase superfamily, CAMK Ser/Thr protein kinase family, PKD subfamily. Contains 1 PH domain. Contains 2 phorbol-ester/DAG-type zinc fingers. Contains 1 protein kinase domain.
翻译后修饰	Phosphorylation of Ser-876 correlates with the activation status of the kinase. Ser-706 is probably phosphorylated by PKC.
细胞定位	Cytoplasm. Membrane. Translocation to the cell membrane is required for kinase activation.

图片



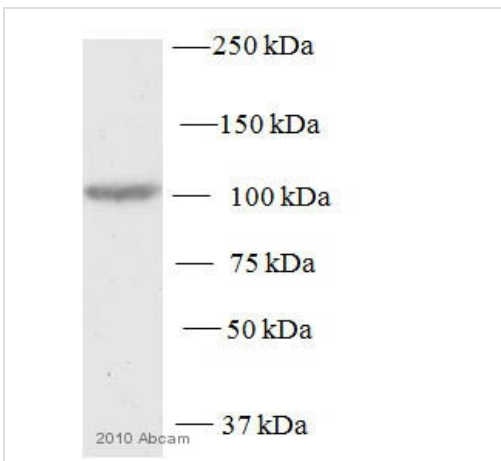
Immunocytochemistry/ Immunofluorescence -
Protein Kinase D2 antibody (ab7281)

Image from Li J et al, J Biol Chem. 2008 Feb 1;283(5):2614-21. Epub 2007 Nov 29, Fig 3. DOI 10.1074/jbc.M707513200

ab7281 staining Protein Kinase D2 in human BON cells (derived from a human pancreatic carcinoid tumor) by Immunocytochemistry/ Immunofluorescence.

BON cells were grown on glass coverslips in 24-well plates. 2 or 3 days after seeding or transfection, cells were treated with vehicle (Me₂SO) or PMA (100 nm) for 30 minutes. After treatment, cells were fixed with 4% paraformaldehyde for 20 minutes at 37 °C. After three washes with PBS, the cells were permeabilized with 0.3% Triton X-100 for 15 minutes at 37 °C and blocked with 1% bovine serum albumin/PBS for 10 minutes. The cells were incubated with the primary antibody diluted with 1% bovine serum albumin/PBS for 1 hour at room temperature. Cells were washed three times with PBS and incubated with Alexa-conjugated secondary antibody diluted by 1/500 in 1% bovine serum albumin/PBS.

Double staining was performed using antibodies ab7281 and an anti-NT. Co-localization is shown by arrows in the merged images.



Western blot - Protein Kinase D2 antibody (ab7281)

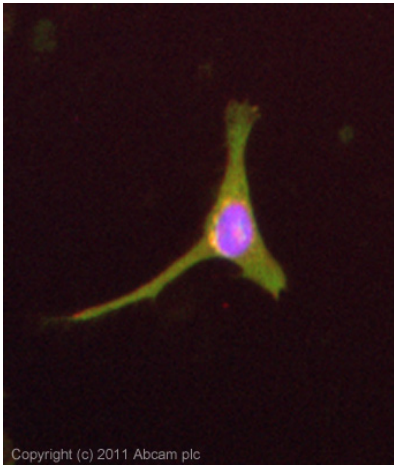
Anti-Protein Kinase D2 antibody (ab7281) at 1/500 dilution + whole cell lysate prepared from murine NIH3T3 cells at 25 µg

Secondary

Donkey anti-rabbit HRP at 1/5000 dilution
Developed using the ECL technique

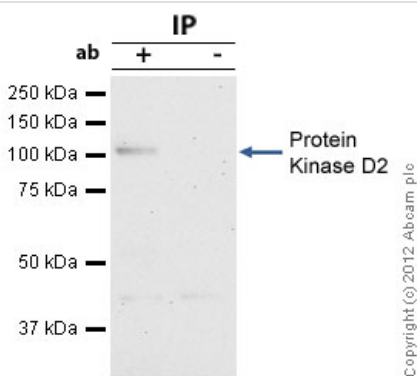
Exposure time : 15 minutes

Image courtesy of an anonymous Abreview



Immunocytochemistry/ Immunofluorescence - Anti-Protein Kinase D2 antibody (ab7281)

ICC/IF image of ab7281 stained HeLa cells. The cells were 4% formaldehyde (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab7281, 5µg/ml) overnight at +4°C. The secondary antibody (green) was [ab96899](#) Dylight 488 goat anti-rabbit IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Immunoprecipitation - Anti-Protein Kinase D2 antibody (ab7281)

Protein Kinase D2 was immunoprecipitated using 0.5mg NIH3T3 whole cell extract, 5µg of Rabbit polyclonal to Protein Kinase D2 and 50µl of protein G magnetic beads (+). No antibody was added to the control (-).

The antibody was incubated under agitation with Protein G beads for 10min, NIH3T3 whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70°C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab7281.

Secondary: Mouse monoclonal [SB62a] Secondary Antibody to Rabbit IgG light chain (HRP) ([ab99697](#)).

Band: 101kDa: Protein Kinase D2

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