abcam

Product datasheet

Anti-CDK5 antibody [EP715Y] ab40773





重组 RabMAb

★★★★★ 7 Abreviews 34 References 6 图像

概述

产品名称 Anti-CDK5抗体[EP715Y]

描述 兔单克隆抗体[EP715Y] to CDK5

宿主 Rabbit

经测试应用 适用于: Flow Cyt (Intra), WB, IP, ICC/IF

种属反应性 与反应: Mouse, Rat, Human

预测可用于: Chicken 📤

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: HeLa whole cell lysate (ab150035), NIH3T3 whole cell lysate, PC-12 whole cell lysate ICC/IF:

SH-SY5Y (Human neuroblastoma epithelial cell)

常规说明 We are constantly working hard to ensure we provide our customers with best in class antibodies.

> As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support

team.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

性能

形式

存放说明 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

存储溶液 pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

纯**度** Protein A purified

 克隆
 单克隆

 克隆编号
 EP715Y

同种型 lgG

应用

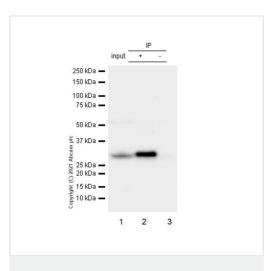
The Abpromise guarantee Abpromise™承诺保证使用ab40773于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

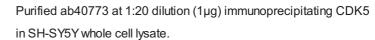
应用	Ab评论	说明
Flow Cyt (Intra)		1/20. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
WB	★★★★ ★ ★ (5)	1/2000. Detects a band of approximately 33 kDa (predicted molecular weight: 33 kDa).
IP		1/20.
ICC/IF		1/50.

靶标	
功能	Probably involved in the control of the cell cycle. Interacts with D1 and D3-type G1 cyclins. Can phosphorylate histone H1, tau, MAP2 and NF-H and NF-M. Also interacts with p35 which activates the kinase.
序列相似性	Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. CDC2/CDKX subfamily.
	Contains 1 protein kinase domain.
细胞定位	Cytoplasm. Cell projection > lamellipodium. Cell projection > growth cone. In axonal growth cone with extension to the peripheral lamellipodia.

图片



Immunoprecipitation - Anti-CDK5 antibody [EP715Y] (ab40773)



Lane 1 (input): SH-SY5Y (Human neuroblastoma epithelial cell) whole cell lysate $10\mu g$.

Lane 2 (+): ab40773 + SH-SY5Y whole cell lysate.

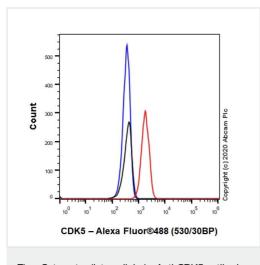
Lane 3 (-): Rabbit monoclonal $\lg G$ (ab172730) instead of ab40773 in SH-SY5Y whole cell lysate.

VeriBlot for IP Detection Reagent (HRP)™(<u>ab131366</u>) (1:1000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDM/TBST.

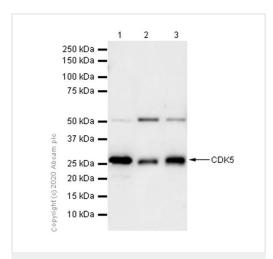
Diluting buffer and concentration: 5% NFDM/TBST.

Observed band size: 33 kDa



Flow Cytometry (Intracellular) - Anti-CDK5 antibody [EP715Y] (ab40773) Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labelling CDK5 with Purified ab40773 at 1:20 dilution (10 μ g/ml) (Red). Cells were fixed with 4%

Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor™ 488, **ab150077**) secondary antibody was used at 1:2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabelled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Western blot - Anti-CDK5 antibody [EP715Y] (ab40773)

All lanes : Anti-CDK5 antibody [EP715Y] (ab40773) at 1/2000 dilution

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

Lane 2: NIH/3T3 (Mouse embryonic fibroblast) whole cell lysateLane 3: PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 33 kDa **Observed band size:** 33 kDa

Blocking and dilution buffer: 5% NFDM/TBST.

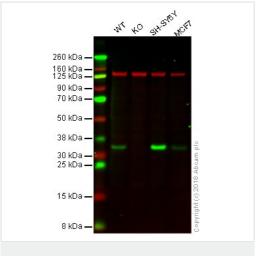
ab40773 MERGED

DAPI

Secondary antibody only control

Immunocytochemistry/ Immunofluorescence - Anti-CDK5 antibody [EP715Y] (ab40773)

Immunocytochemistry analysis of SH-SY5Y (Human neuroblastoma epithelial cell) cells labeling CDK5 with Purified ab40773 at 1/50 dilution (4.6 μ g/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 μ g/mL). Goat anti rabbit lgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 μ g/mL) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Western blot - Anti-Cdk5 antibody [EP715Y] (ab40773)

All lanes : Anti-CDK5 antibody [EP715Y] (ab40773) at 1/2000 dilution (Unpurified)

Lane 1: Wild-type HAP1 whole cell lysate

Lane 2: CDK5 knockout HAP1 whole cell lysate

Lane 3 : SHSY5Y whole cell lysate

Lane 4 : MCF7 whole cell lysate

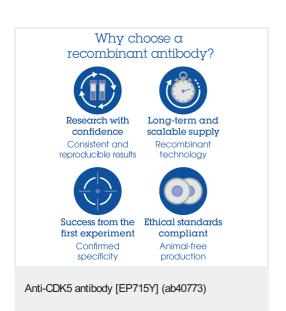
Lysates/proteins at 20 µg per lane.

Predicted band size: 33 kDa
Observed band size: 33 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab40773 observed at 33 kDa. Red - loading control, <u>ab130007</u>, observed at 130 kDa.

ab40773 was shown to specifically react with Cdk5 in wild-type HAP1 cells as signal was lost in CDK5 knockout cells. Wild-type and CDK5 knockout samples were subjected to SDS-PAGE.

Ab40773 and ab130007 (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 1/2000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



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