# abcam

#### Product datasheet

# Anti-CDK5 antibody [EP715Y] ab40773



★★★★★ 7 Abreviews 34 References

画像数 6

#### 製品の概要

製品名 Anti-CDK5 antibody [EP715Y]

製品の詳細 Rabbit monoclonal [EP715Y] to CDK5

由来種 Rabbit

アプリケーション 適用あり: Flow Cyt (Intra), WB, IP, ICC/IF

種交差性 交差種: Mouse, Rat, Human

交差が予測される動物種: Chicken 📤

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

ポジティブ・コントロール WB: HeLa whole cell lysate (ab150035), NIH3T3 whole cell lysate, PC-12 whole cell lysate ICC/IF:

SH-SY5Y (Human neuroblastoma epithelial cell)

特記事項 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.

## 製品の特性

製品の状態

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

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

精製度 Protein A purified

**ポリ/モノ** モノクローナル

**クローン名** EP715Y

アイソタイプ lgG

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab40773の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
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.

#### ターゲット情報

機能 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.

**配列類似性** Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. CDC2/CDKX

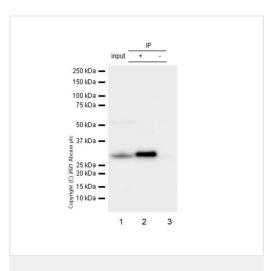
subfamily.

Contains 1 protein kinase domain.

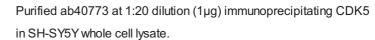
細胞内局在 Cytoplasm. Cell projection > lamellipodium. Cell projection > growth cone. In axonal growth cone

with extension to the peripheral lamellipodia.

### 画像



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.

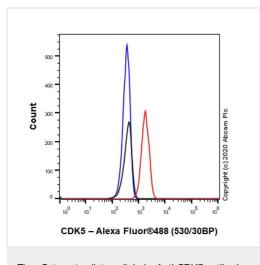
Lane 3 (-): Rabbit monoclonal  $\lg G$  (ab172730) instead of ab40773 in SH-SY5Y whole cell lysate.

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

Blocking Buffer and concentration: 5% NFDM/TBST.

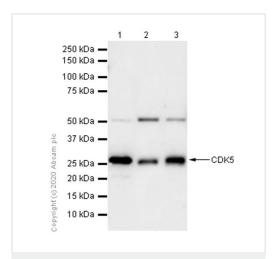
Diluting buffer and concentration: 5% NFDM/TBST.

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  $\mu$ 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.

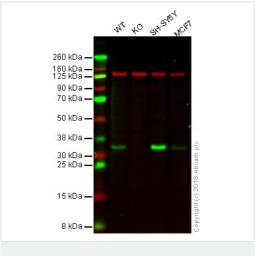
ab40773 MERGED

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  $\mu$ 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  $\mu$ g/mL). Goat anti rabbit lgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2  $\mu$ 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

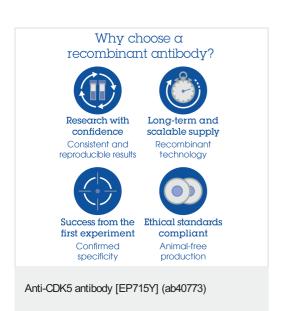
Lysates/proteins at 20 µg per lane.

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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