

## Product datasheet

# Anti-Casein Kinase 1 delta antibody [AF12G4] ab85320

★★★★★ 1 Abreviews 3 References 4 图像

### 概述

<b>产品名称</b>	Anti-Casein Kinase 1 delta 抗体[AF12G4]
<b>描述</b>	小鼠单克隆抗体[AF12G4] to Casein Kinase 1 delta
<b>宿主</b>	Mouse
<b>经测试应用</b>	<b>适用于:</b> IHC-P, Flow Cyt, WB, IP, ELISA
<b>种属反应性</b>	<b>与反应:</b> Mouse, Rat, Human
<b>免疫原</b>	Recombinant full length protein (His-tag) corresponding to Human Casein Kinase 1 delta aa 1-415. Purified from E.coli. Database link: <a href="#">P48730</a>
<b>阳性对照</b>	HeLa, K562, SK-N-MC, 293T and L929 cell lysates. This antibody also gave a positive signal in Human Alzheimer brain (hippocampus) tissue section.
<b>常规说明</b>	This product was changed from ascites to tissue culture supernatant on 18th September 2017. Lot numbers higher than GR155202 will be from tissue culture supernatant. Please note that the dilutions may need to be adjusted accordingly.  Abcam is committed to meeting high standards of ethical manufacturing and has decided to discontinue this product by June 2019 as it has been generated by the ascites method. We are sorry for any inconvenience this may cause.

### 性能

<b>形式</b>	Liquid
<b>存放说明</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>存储溶液</b>	Preservative: 0.03% Sodium Azide Constituents: 50% Glycerol, 0.01% BSA, HEPES, 0.15M Sodium chloride
<b>纯度</b>	Protein G purified
<b>克隆</b>	单克隆
<b>克隆编号</b>	AF12G4
<b>同种型</b>	IgG2b
<b>轻链类型</b>	kappa

### 应用

Our [Abpromise guarantee](#) covers the use of **ab85320** in the following tested applications.

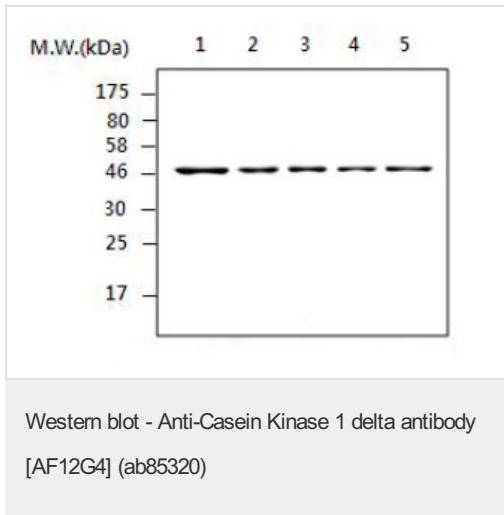
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用	Ab评论	说明
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
Flow Cyt		Use at an assay dependent concentration. <a href="#">ab170192</a> - Mouse monoclonal IgG2b, is suitable for use as an isotype control with this antibody.
WB	★★★★★	Use a concentration of 0.05 µg/ml. Detects a band of approximately 47 kDa (predicted molecular weight: 47 kDa).
IP		Use at an assay dependent concentration. Use at 2µl
ELISA		Use at an assay dependent concentration.

## 靶标

功能	Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates. It can phosphorylate a large number of proteins. Participates in Wnt signaling. Central component of the circadian clock. May act as a negative regulator of circadian rhythmicity by phosphorylating PER1 and PER2. Retains PER1 in the cytoplasm.
组织特异性	Expressed in all tissues examined, including brain, heart, lung, liver, pancreas, kidney, placenta and skeletal muscle. In blood, highly expressed in hemopoietic cells and mature granulocytes. Also found in monocytes and lymphocytes.
疾病相关	Defects in CSNK1D are a cause of familial advanced sleep-phase syndrome (FASPS) [MIM:604348]. FASPS is characterized by very early sleep onset and offset. Individuals are 'morning larks' with a 4 hours advance of the sleep, temperature and melatonin rhythms.
序列相似性	Belongs to the protein kinase superfamily. CK1 Ser/Thr protein kinase family. Casein kinase I subfamily. Contains 1 protein kinase domain.
翻译后修饰	Autophosphorylated on serine and threonine residues.
细胞定位	Cytoplasm. Nucleus.

## 图片



**All lanes :** Anti-Casein Kinase 1 delta antibody [AF12G4] (ab85320) at 1/5000 dilution

**Lane 1 :** HeLa cell lysate

**Lane 2 :** K562 cell lysate

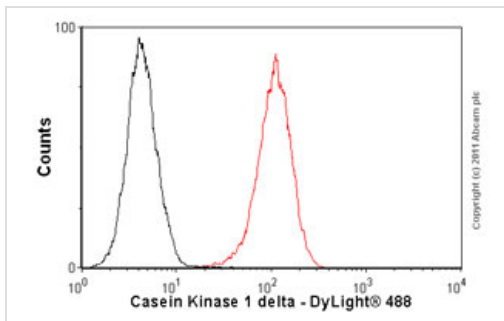
**Lane 3 :** SK-N-MC cell lysate

**Lane 4 :** 293T cell lysate

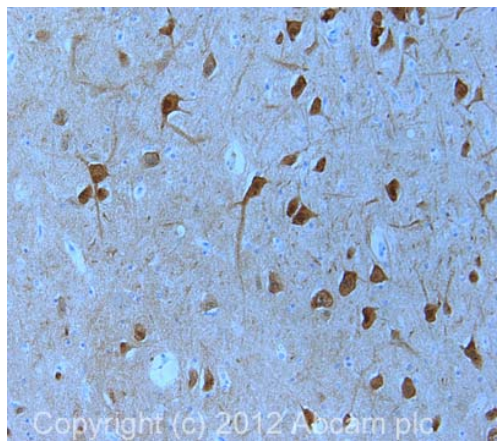
**Lane 5 :** L929 cell lysate

**Predicted band size:** 47 kDa

**Observed band size:** 47 kDa



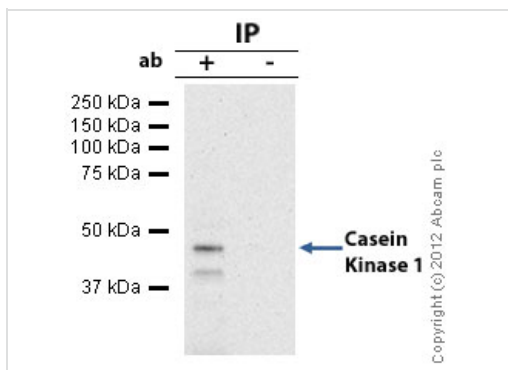
Overlay histogram showing HeLa cells stained with ab85320 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab85320, 1µg/1x10<sup>6</sup> cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2b [PLPV219] (ab91366, 2µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HeLa cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Casein Kinase 1 delta antibody [AF12G4] (ab85320)

IHC image of ab85320 staining in human Alzheimer brain (hippocampus) formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab85320, 0.2µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Immunoprecipitation - Anti-Casein Kinase 1 delta antibody [AF12G4] (ab85320)

Casein Kinase 1 delta was immunoprecipitated using 0.5mg Hela whole cell extract, 5µg of Mouse monoclonal to Casein Kinase 1 delta 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, Hela 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 ab85320.

Secondary: Goat polyclonal to mouse IgG light chain specific (HRP) at 1/5000 dilution.

Band: 47kDa: Casein Kinase 1 delta; non specific - 40kDa: We are unsure as to the identity of this extra band.

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