# abcam

## Product datasheet

## Anti-Cdc25A (phospho S178) antibody ab79252

2 References 2 图像

概述

产品名称 Anti-Cdc25A (phospho S178)抗体

描述 兔多克隆抗体to Cdc25A (phospho S178)

**宿主** Rabbit

**经测试应用 适用于:** WB, ⊮C-P

种属反应性 与反应: Human

预测可用于: Mouse, Rat 🔷

免疫原 Synthetic peptide corresponding to Human Cdc25A (phospho S178).

阳性对照 WB: extracts from UV-treated A549 cells; IHC-P: Human breast carcinoma tissue.

常规说明

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

性能

形式 Liquid

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

**存储溶液** pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride

Without Mg2+ and Ca2+

纯**度** Immunogen affinity purified

纯**化**说明 Purified from rabbit antiserum by affinity chromatography using epitope-specific phosphopeptide.

The antibody against non-phosphopeptide was removed by chromatography using non-

phosphopeptide corresponding to the phosphorylation site.

**克隆** 多克隆

1

同种型 lgG

#### 应用

#### The Abpromise guarantee

Abpromise™承诺保证使用ab79252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
WB		1/500 - 1/1000. Predicted molecular weight: 59 kDa.
IHC-P		1/50 - 1/100.

#### 靶标

功能

Tyrosine protein phosphatase which functions as a dosage-dependent inducer of mitotic progression. Directly dephosphorylates CDK1 and stimulates its kinase activity. Also dephosphorylates CDK2 in complex with cyclin E, in vitro.

序列相似性

Belongs to the MPI phosphatase family.

Contains 1 rhodanese domain.

结构域

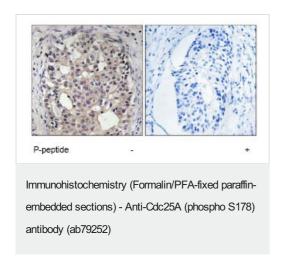
The phosphodegron motif mediates interaction with specific F-box proteins when phosphorylated. Putative phosphorylation sites at Ser-79 and Ser-82 appear to be essential for this interaction.

翻译后修饰

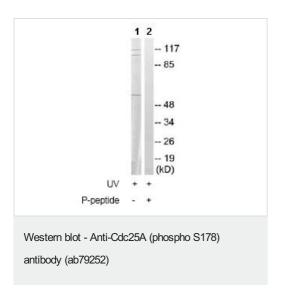
Phosphorylated by CHEK1 on Ser-76, Ser-124, Ser-178, Ser-279, Ser-293 and Thr-507 during checkpoint mediated cell cycle arrest. Also phosphorylated by CHEK2 on Ser-124, Ser-279, and Ser-293 during checkpoint mediated cell cycle arrest. Phosphorylation on Ser-178 and Thr-507 creates binding sites for YWHAE/14-3-3 epsilon which inhibits CDC25A. Phosphorylation on Ser-76, Ser-124, Ser-178, Ser-279 and Ser-293 may also promote ubiquitin-dependent proteolysis of CDC25A by the SCF complex. Phosphorylation of CDC25A at Ser-76 by CHEK1 primes it for subsequent phosphorylation at Ser-79, Ser-82 and Ser-88 by NEK11. Phosphorylation by NEK11 is required for BTRC-mediated polyubiquitination and degradation. Phosphorylation by PIM1 leads to an increase in phosphatase activity. Phosphorylated by PLK3 following DNA damage, leading to promote its ubiquitination and degradation.

Ubiquitinated by the anaphase promoting complex/cyclosome (APC/C) ubiquitin ligase complex that contains FZR1/CDH1 during G1 phase leading to its degradation by the proteasome. Ubiquitinated by a SCF complex containing BTRC and FBXW11 during S phase leading to its degradation by the proteasome. Deubiquitination by USP17L2/DUB3 leads to its stabilization.

图片



Left panel: immunohistochemistry analysis of paraffin-embedded Human breast carcinoma tissue using 1/50 ab79252. Right panel: same, after pre-incubation with the immunizing peptide.



**All lanes :** Anti-Cdc25A (phospho S178) antibody (ab79252) at 1/500 dilution

Lane 1: Extracts from A549 cell treated

with UV (15mins)

Lane 2: Extracts from A549 cell treated

with UV (15mins) with immunizing phosphopeptide at 10 μg

Lysates/proteins at 30 µg per lane.

Predicted band size: 59 kDa
Observed band size: 59 kDa

Additional bands at: 110 kDa, 117 kDa. We are unsure as to the

identity of these extra bands.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Replacement or refund for products not performing as stated on the datasheet
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- Response to your inquiry within 24 hours
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