abcam

Product datasheet

Recombinant human Cdc25A protein ab105905

5 图像

描述

产品名称 重组人Cdc25A蛋白

生物活性 Specific activity 31 nmol phosphate released/min/mg.

纯**度** > 80 % Densitometry.

ab105905 was determined to be >80% pure by densitometry. Affinity purified.

表达系统 Baculovirus infected Sf9 cells

Accession P30304

蛋白长度 Full length protein

无动物成分 No

性质 Recombinant

种属 Human

预测分子量 94 kDa including tags

氨基酸 1 to 524

技术指标

Our **Abpromise guarantee** covers the use of **ab105905** in the following tested applications.

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

应**用** Western blot

Functional Studies

形式 Liquid

制备和贮存

稳**定性和存储** Shipped on dry ice. Upon delivery aliquot and store at -80℃. Avoid freeze / thaw cycles.

pH: 7.50

Constituents: 0.307% Glutathione, 0.00174% PMSF, 0.00385% DTT, 0.79% Tris HCI, 0.00292%

EDTA, 25% Glycerol (glycerin, glycerine), 0.87% Sodium chloride

This product is an active protein and may elicit a biological response in vivo, handle with caution.

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

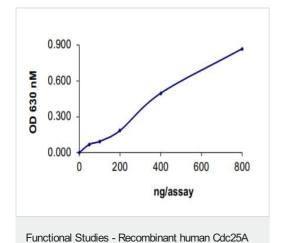
Phosphorylated by CHEK1 on Ser-76, Ser-124, Ser-178, Ser-279, Ser-293 and Thr-507 during checkpoint mediated cell cycle arrest. Also phosphorylated by CHEK2 on Ser-124, Ser-279, and Ser-293 during checkpoint mediated cell cycle arrest. Phosphorylation on Ser-178 and Thr-507 creates binding sites for 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 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

protein (ab105905)



The specific activity of Cdc25A (ab105905) was determined to be 36 phosphate released/min/mg as per activity assay protocol



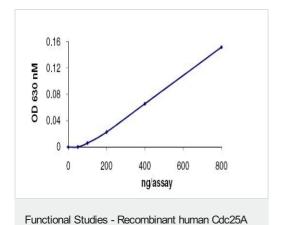
SDS PAGE analysis of ab105905

SDS-PAGE - Recombinant human Cdc25A protein (ab105905)



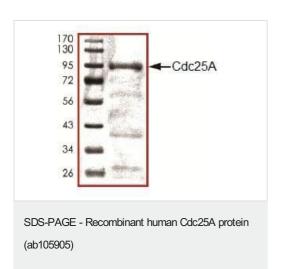
SDS PAGE analysis of ab105905

SDS-PAGE - Recombinant human Cdc25A protein (ab105905)



protein (ab105905)

The specific activity of ab105905 was determined to be 31 nmol phosphate released/min/mg.



The purity of ab105905 was determined to be >80% by densitometry.

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