

# Recombinant human Cdc25A protein ab90763

## 1 References

### 製品の詳細

製品名	Recombinant human Cdc25A protein
生理活性	Activity: 1 nmol of Cdc25A will hydrolyze 10 nmol of pNPP per minute at 37°C at pH 8.0. Assay buffer: 50 mM Tris-HCl, pH 8.0, 50 mM NaCl, 0.1 mM EDTA.
精製度	> 90 % SDS-PAGE.
発現系	Escherichia coli
アクセッション番号	<b>P30304</b>
タンパク質長	Full length protein
Animal free	No
由来	Recombinant
生物種	Human
配列	ELGPEPPHRRRLLFACSPPPASQPVVKALFGASAAGGLSPVT NLTVTMDQ LQGLGSDYEQPLEVKNNSNLQRMGSSESTDSGFCLDSPGPLD SKENLENP MRRIHSLPQKLLGCSPALKRSHSDSLDHDIFQLIDPDENKEN EAFEFKKP VRPVS RGCLHSHGLQEGKDLFTQRQNSAPARMLSSNERDSSE PGNFIPLF TPQSPVTATLSEDDGFVDLLDGENLKNEETPSCMASLWTA PLVMRTTN LDNRCKLFDSPSLCSSSTRSVLKRPERSQEESPPGSTKRRKS MSGASPKE STNPEKAHETLHQSLSLASSPKGTIENILDNDPRDLIGDFSK GYLFHTVA GKHQDLKYISPEIMASVLNGKFANLIKEFVIIDCRYPYEG GHIKAVN LHMEEVEDFLLKKPIVPTDGKRVIVVFHCFSSERGPRMCR YVRERDRL GNEYPKLHYPELYVLKGGYKEFFMKCQSYCEPPSYRPMHHED FKEDLKKF RTKSRTWAGEKSKREMY SRLKKL

### 特性

Our **Abpromise guarantee** covers the use of **ab90763** in the following tested applications.

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

アプリケーション                      Functional Studies

SDS-PAGE

製品の状態                          Liquid

#### 前処理および保存

保存方法および安定性              Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 7.20

Constituents: 0.0308% DTT, 0.595% HEPES, 0.232% Sodium chloride

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

#### 関連情報

機能                                      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.

配列類似性                              Belongs to the MPI phosphatase family.

Contains 1 rhodanese domain.

ドメイン                                 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.

翻訳後修飾                              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.

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

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