

Rabbit CDC25A Polyclonal Antibody | anti-CDC25A antibody

CDC25A Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA322284	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

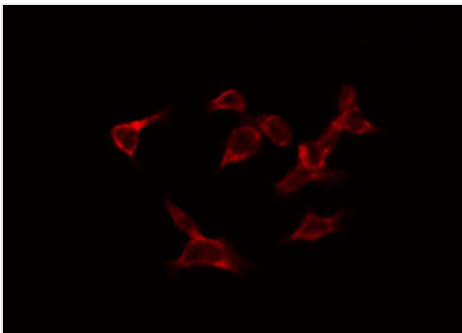
PRODUCT SYNONYMS

CDC25A; Polyclonal Antibody; CDC25A Antibody; Cdc 25a; CDC25A2; CDC25A2 CAG isoform; Cell division cycle 25 homolog A (S. pombe); Cell division cycle 25A; Cell division cycle 25A isoform a; Cell division cycle 25A isoform b; D9Ert393e; Dual specificity phosphatase Cdc25A; M phase inducer phosphatase 1; M-phase inducer phosphatase 1; MGC115549; MPIP1_HUMAN; anti-CDC25A antibody

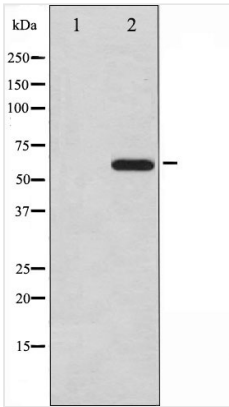
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	CDC25A antibody detects endogenous levels of total CDC25A
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	524
Applicable Applications for anti-CDC25A antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide derived from human CDC25A
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Rabbit, Dog, Chicken
Similarity	Pig (100%), Bovine (100%), Horse (100%), Sheep (91%), Rabbit (100%), Dog (91%), Chicken (80%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)
AAA322284 staining HeLa by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



WB (Western Blot)
Western blot analysis of CDC25A expression in UV treated A2780 whole cell lysates, The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-CDC25A antibody	Description: CDC25A is a member of the CDC25 family of phosphatases. CDC25A is required for progression from G1 to the S phase of the cell cycle. It activates the cyclin-dependent kinase CDC2 by removing two phosphate groups. Function: 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. Subunit Structure: Interacts with CCNB1/cyclin B1. Interacts with YWHAE/14-3-3 epsilon when phosphorylated. Interacts with CUL1 specifically when CUL1 is neddylated and active. Interacts with BTRC/BTRCP1 and FBXW11/BTRCP2. Interactions with CUL1, BTRC and FBXW11 are enhanced upon DNA damage. Interacts with PIM1. Interacts with CHEK2; mediates CDC25A phosphorylation and degradation in response to infrared-induced DNA damages. Interacts with HSP90AB1; prevents heat shock-mediated CDC25A degradation and contributes to cell cycle progression (PubMed:22843495). Post-translational Modifications: 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. Similarity: 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. Belongs to the MPI phosphatase family.
References	Yuan Y, Wu J, Li B, Niu J, Tan H, Qiu S; Journal: Sci Rep. Regulation of Signaling Pathways Involved in the Anti-proliferative and Apoptosis-inducing Effects of M22 against Non-small Cell Lung Adenocarcinoma A549 Cells.

NCBI AND UNIPROT INFORMATION

NCBI GI #	42490758
NCBI GeneID	993
NCBI Accession #	NP_001780.2
NCBI GenBank Nucleotide #	NM_001789.2

UniProt Accession #	P30304 ; Q8IZH5 ; Q96IL3 ; Q9H2F2
Molecular Weight	Observed: 60 kDa Predicted: 60 kDa
NCBI Official Full Name	M-phase inducer phosphatase 1 isoform a
NCBI Official Synonym Full Names	cell division cycle 25A
NCBI Official Symbol	CDC25A
NCBI Official Synonym Symbols	CDC25A2
NCBI Protein Information	M-phase inducer phosphatase 1
UniProt Protein Name	M-phase inducer phosphatase 1
UniProt Gene Name	CDC25A

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/cdc25a-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/322284>