

cdc2 Recombinant Antibody | CDK1 recombinant antibody

Phospho-cdc2 (Tyr15) Antibody, Rabbit MAb

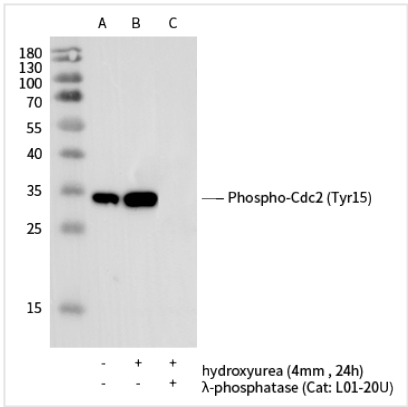
CATALOG # AAA259508	HOST Rabbit	REACTIVITY Human	APPLICATIONS Western Blot
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PRODUCT SYNONYMS

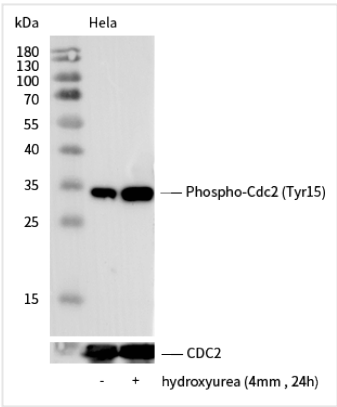
cdc2; Monoclonal Recombinant Antibody; Phospho-cdc2 (Tyr15) Antibody; Rabbit MAb; cyclin-dependent kinase 1; Anti-CDC2 Antibody; Anti-CDC28A Antibody; Anti-CDKN1 Antibody; Anti-P34CDC2 Antibody; CDK1 recombinant antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Number	0019
Specificity	Human Phospho-cdc2 (Tyr15)Species predicted to react based on 100% sequence homology: Mouse, Rat, Cynomolgus, Bovin, Chicken, Fruit fly
Purity/Purification	Protein A
Form/Format	Liquid; 10 mM sodium HEPES, 150 mM NaCl, 100ug/mL BSA, 50% glycerol, pH 7.5
Applicable Applications for CDK1 recombinant antibody	WB (Western Blot)
Immunogen	A synthetic phosphopeptide corresponding to residues around Tyr15 of the Human cdc2
Preparation	This antibody was obtained from a rabbit immunized with a synthetic phosphopeptide corresponding to residues around Tyr15 of the Human cdc2.
Preparation and Storage	This antibody can be stored at 2 degree C-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles. This antibody is shipped as liquid solution at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.



WB (Western Blot)
Western blot analysis of extracts from serum-starved HeLa, untreated (line A); treated with hydroxyurea (4mm, 24h, +)(line B); treated with hydroxyurea and lambda-phosphatase (line C) using Phospho-Cdc2 (Tyr15) Antibody, Rabbit MAb (#AAA259508) at 1:10000 dilution.



WB (Western Blot)
Western blot analysis of extracts from serum-starved HeLa, untreated (-) or treated with hydroxyurea (4mm, 24h; +), using Phospho-Cdc2 (Tyr15) Antibody, Rabbit MAb (#AAA259508) at 1:10000 dilution(upper) or Anti-CDK1/CDC2 Antibody, Rabbit PAb at 1:2000 dilution (lower).

ADDITIONAL INFORMATION

Related Product Information for CDK1 recombinant antibody	CDC2, also known as CDK1, contains 1 protein kinase domain and belongs to the protein kinase superfamily, CMGC Ser/Thr protein kinase family, CDC2/CDKX subfamily. CDC2 is a catalytic subunit of the highly conserved protein kinase complex known as M-phase promoting factor (MPF), which is essential for G1/S and G2/M phase transitions of eukaryotic cell cycle. Mitotic cyclins stably associate with CDC2 and function as regulatory subunits. The kinase activity of CDK1 is controlled by cyclin accumulation and destruction through the cell cycle. The phosphorylation and dephosphorylation of CDC2 also play important regulatory roles in cell cycle control. It is required in higher cells for entry into S-phase and mitosis. CDC2 also is a cyclin-dependent kinase which displays CTD kinase activity and is required for RNA splicing. It has CTD kinase activity by hyperphosphorylating the C-terminal heptapeptide repeat domain (CTD) of the largest RNA polymerase II subunit RPB1, thereby acting as a key regulator of transcription elongation. CDK1 is required for RNA splicing, possibly by phosphorylating SRSF1/SF2. It is involved in regulation of MAP kinase activity, possibly leading to affect the response to estrogen inhibitors.
References	Le. MG. e. al. (1987. Complementatio. use. t. clon. . huma. homologu. o. th. fissio. yeas. cel. cycl. contro. gen. cdc2. Nature. 327(6117):31-5.Enserin. JM. e. al. (2010. A. overvie. o. Cdk1-controlle. target. an. processes. Cel. Division. 5(11). 1-41.Ninomiya-Tsuj. J. e. al. (1991. Clonin. o. . huma. cDN. encodin. . CDC2-relate. kinas. b. complementatio. o. . buddin. yeas. cdc2. mutation. Pro. Nat. Aca. Sci. 88(20):9006-10.Zha. Q. e. al. (1999. Associatio. wit. Cdc. an. inhibitio. o. Cdc2/Cycli. B. kinas. activit. b. th. p53-regulate. protei. Gadd45. Oncogene. 18(18):2892-900.Ji. S. e. al. (2000. Th. GADD4. inhibitio. o. Cdc. kinas. correlate. wit. GADD45-mediate. growt. suppression. . Bio. Chem. 275(22):16602-8.

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.