Best Tools for immunology Research

Cdc25A (phospho Ser124) Polyclonal Antibody

Catalog No :	YP0351
Reactivity :	Human;Mouse;Rat
Applications :	WB;ELISA
Target :	Cdc25A
Fields :	>>Cell cycle;>>Cellular senescence;>>Progesterone-mediated oocyte maturation;>>MicroRNAs in cancer;>>Chemical carcinogenesis - receptor activation
Gene Name :	CDC25A
Protein Name :	M-phase inducer phosphatase 1
Human Gene Id :	993
Human Swiss Prot No :	P30304
Mouse Swiss Prot No :	P48964
Rat Gene Id :	171102
Rat Swiss Prot No :	P48965
Immunogen :	The antiserum was produced against synthesized peptide derived from human CDC25A around the phosphorylation site of Ser124. AA range:90-139
Specificity :	Phospho-Cdc25A (S124) Polyclonal Antibody detects endogenous levels of Cdc25A protein only when phosphorylated at S124.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. ELISA: 1:5000. Not yet tested in other applications.

Purification : The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 70kD

Cell Pathway : Cell_Cycle_G1S;Cell_Cycle_G2M_DNA;Progesterone-mediated oocyte maturation;

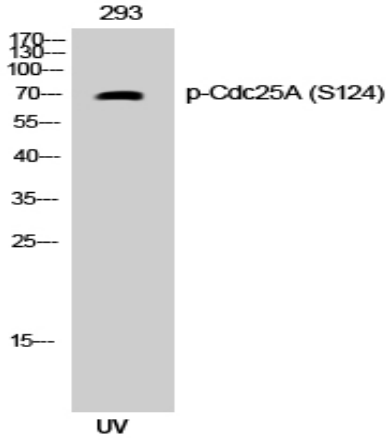
Background : cell division cycle 25A(CDC25A) Homo sapiens CDC25A is a member of the CDC25 family of phosphatases. CDC25A is required for progression from G1 to the S phase of the cell cycle. It activates the cyclin-dependent kinase CDC2 by removing two phosphate groups. CDC25A is specifically degraded in response to DNA damage, which prevents cells with chromosomal abnormalities from progressing through cell division. CDC25A is an oncogene, although its exact role in oncogenesis has not been demonstrated. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008],

Function : catalytic activity:Protein tyrosine phosphate + H(2)O = protein tyrosine + phosphate.,domain: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.,enzyme regulation:Stimulated by B-type cyclins.,function:Tyrosine protein phosphatase which functions as a dosage-dependent inducer of mitotic progression. Directly dephosphorylates CDC2 and stimulates its kinase activity. Also dephosphorylates CDK2 in complex with cyclin E, in vitro.,PTM: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 whi

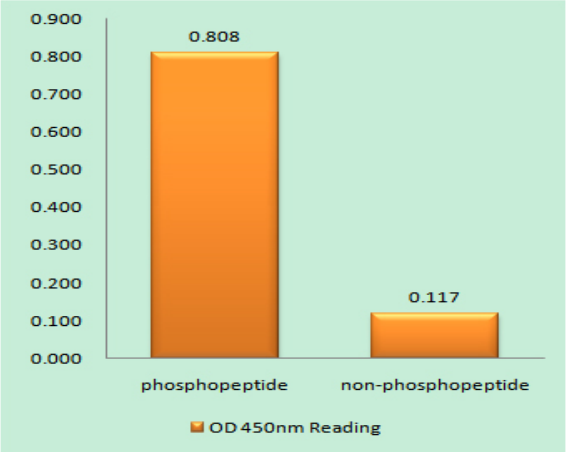
Subcellular Location : intracellular,nucleus,nucleoplasm,cytoplasm,cytosol,

Expression : Lymph,

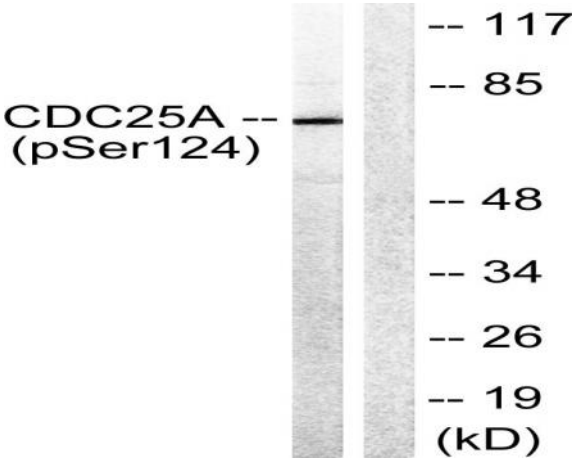
Products Images



Western Blot analysis of 293 cells using Phospho-Cdc25A (S124) Polyclonal Antibody



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using CDC25A (Phospho-Ser124) Antibody



Western blot analysis of lysates from 293 cells treated with UV 15', using CDC25A (Phospho-Ser124) Antibody. The lane on the right is blocked with the phospho peptide.