



# Cdc25A (phospho Ser75) Polyclonal Antibody

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>                  | YP-Ab-16582                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Applications</b>                | WB;IHC;IF;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Gene Name</b>                   | CDC25A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Immunogen</b>                   | Synthesized phospho-peptide around the phosphorylation site of human Cdc25A (phospho Ser75)                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Specificity</b>                 | Phospho-Cdc25A (S75) Polyclonal Antibody detects endogenous levels of Cdc25A protein only when phosphorylated at S75.                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Source</b>                      | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Purification</b>                | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Dilution</b>                    | WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Synonyms</b>                    | Cdc 25a;CDC25A;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                                                                                                                                                                                                               |
| <b>Observed Band</b>               | 59kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Calculated Molecular Weight</b> | 59kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Cell Pathway</b>                | intracellular,nucleus,nucleoplasm,cytoplasm,cytosol,                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Tissue Specificity</b>          | Lymph,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Function</b>                    | catalytic activity:Protein tyrosine phosphate + H(2)O = protein tyrosine + phosphate.,domain:The phosphodegion 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

**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],

**matters needing attention**

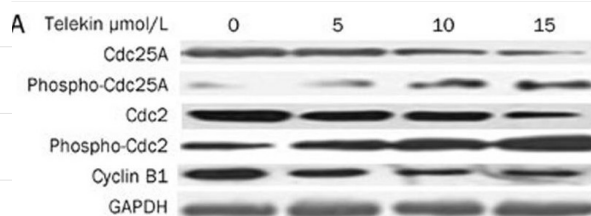
Avoid repeated freezing and thawing!

**Usage suggestions**

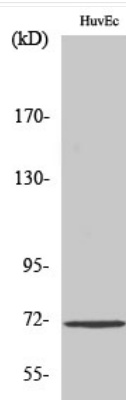
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



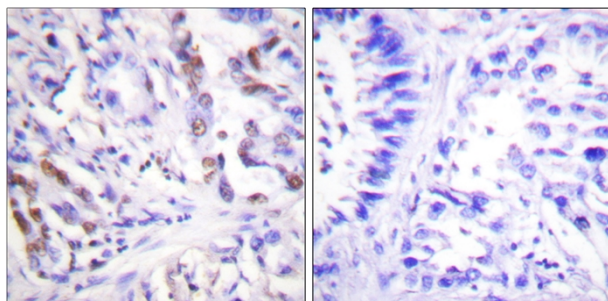
## Products Images



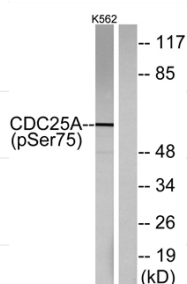
Li, Lin, et al. "Telekin suppresses human hepatocellular carcinoma cells in vitro by inducing G 2/M phase arrest via the p38 MAPK signaling pathway." *Acta Pharmacologica Sinica* 35.10 (2014): 1311.



Western Blot analysis of various cells using Phospho-Cdc25A (S75) Polyclonal Antibody



Immunohistochemistry analysis of paraffin-embedded human breast cancer, using CDC25A (Phospho-Ser75) Antibody. The picture on the right is blocked with the CDC25A (Phospho-Ser75) peptide.



Western blot analysis of CDC25A (Phospho-Ser75) Antibody. The lane on the right is blocked with the CDC25A (Phospho-Ser75) peptide.