



## Rabbit Anti-Cdc14A antibody

SL8614R

<b>Product Name:</b>	Cdc14A
<b>Chinese Name:</b>	细胞周期调控因子14A抗体
<b>Alias:</b>	CDC 10; Cdc 14; Cdc 14A; Cdc 14A1; Cdc 14A2; CDC10; Cdc14; CDC14 cell division cycle 14 homolog A; CDC14 homolog A; Cdc14A1; Cdc14A2; Cell division cycle 14 homolog A; Dual specificity protein phosphatase CDC 14A; Dual specificity protein phosphatase CDC14A; hCDC14; CC14A_HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Cow,Horse,Sheep,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	67kDa
<b>Cellular localization:</b>	The nucleuscytoplasmic
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human Cdc14A:51-150/594
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	In budding yeast, the Cdc14a phosphatase activates mitotic exit by dephosphorylation of specific cyclin-dependent kinase (Cdk) substrates and seems to be regulated by sequestration in the nucleolus until its release during mitosis. Human Cdc14a phosphatase is highly similar to Saccharomyces cerevisiae Cdc14 and is a member of the

dual specificity protein Tyrosine phosphatase family. It interacts with and dephosphorylates tumor suppressor protein p53 and may regulate the function of p53. In addition, Cdc14a dephosphorylates hCdh1 and activates APCCdh1. Cdc14a phosphatase plays a role in the regulation of the centrosome cycle, mitosis and cytokinesis, thereby influencing chromosome partitioning and genomic stability in human cells. Deregulated human Cdc14a phosphatase disrupts centrosome separation and chromosome segregation.

**Function:**

Overproduction of hCdc14A leads to progressive cell death, accompanied by accumulation of pre-G1 DNA fragments and gradual elimination of cells at the G2/M transition. In 50% of the mitotic cells, multipolar mitotic spindles and misaggregated chromosomes are found. hCdc14A localizes to the centrosomes at the cell-cycle interphase stage. When the cell enters mitosis, this localization disappears suggesting that hCdc14A dissociates from the centrosomes at the G2/M transition. hCdc14A localizes to interphase centrosomes, but not to mitotic centrosomes, while hCdc14B localizes to the interphase nucleolus. Thus each isoform regulates separate cell cycle events. Cdc14A may affect cell cycle progression by its ability to dephosphorylate p53 at Ser315. This phosphatase activity is mediated by the interaction between the N-terminus of hCdc14A and the C-terminus of p53.

**Subunit:**

Interacts with KIF20A, which is required to localize CDC14 to the midzone of the mitotic spindle.

**Subcellular Location:**

Nucleus. Cytoplasm, cytoskeleton, centrosome. Cytoplasm, cytoskeleton, spindle. Note=Centrosomal during interphase, released into the cytoplasm at the onset of mitosis. Subsequently localizes to the midzone of the mitotic spindle.

**Tissue Specificity:**

Widely expressed.

**Similarity:**

Belongs to the protein-tyrosine phosphatase family. Non-receptor class CDC14 subfamily.

**SWISS:**

Q9UNH5

**Gene ID:**

8556

**Database links:**

[Entrez Gene: 8556](#)Human

[Entrez Gene: 229776](#)Mouse

[Entrez Gene: 310806](#)Rat

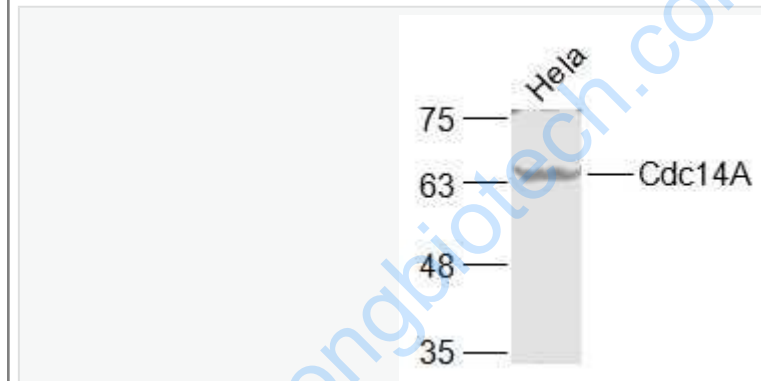
[Oimim: 603504](#)Human

[SwissProt: Q9UNH5](#)Human

[SwissProt: Q6GQT0](#)Mouse

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



**Picture:**

Sample:

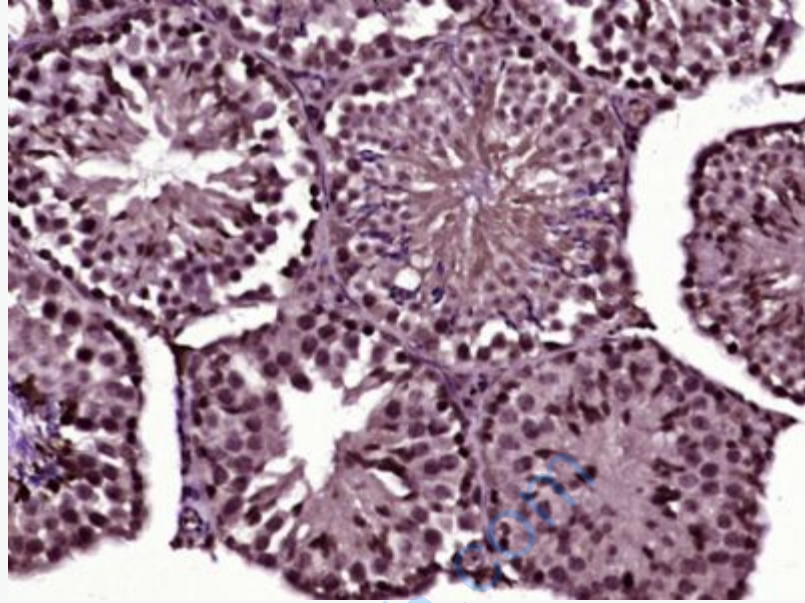
HeLa(Human) Cell Lysate at 30 ug

Primary: Anti-Cdc14A (SL8614R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 67 kD

Observed band size: 67 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse testis); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Cdc14A) Polyclonal Antibody, Unconjugated (SL8614R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.