



# Cdc14a phosphatase Monoclonal Antibody

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| <b>Catalog No</b>                  | YP-mAb-16672                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Applications</b>                | WB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Gene Name</b>                   | CDC14A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Immunogen</b>                   | Synthesized peptide derived from the Internal region of human Cdc14a phosphatase.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Specificity</b>                 | Cdc14a phosphatase Monoclonal Antibody detects endogenous levels of Cdc14a phosphatase protein.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Source</b>                      | Monoclonal, Mouse,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Purification</b>                | The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Dilution</b>                    | WB 1:500-1:2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Synonyms</b>                    | CDC 1;Cdc 14;Cdc 14A;Cdc 14A1;Cdc 14A2;CDC1 (cell division cycle 1;S. cerevisiae;homolog);CDC1;Cdc14;CDC14 cell division cycle 14 homolog A; CDC14 homolog A;Cdc14A1;Cdc14A2;Cell division cycle 14 homolog A;Cell division cycle 14;homolog A;Cell division cycle 14A;Dual specificity protein phosphatase CDC 14A;Dual specificity protein phosphatase CDC14A;hCDC 14; hCDC14;OTTHUMP12653;OTTHUMP12654;OTTHUMP12655;Cdc14a phosphatase;CDC14A                                                                                                                                                     |
| <b>Observed Band</b>               | 66kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Calculated Molecular Weight</b> | 66 KD; 67kD(Calculated).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Cell Pathway</b>                | Nucleus . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Cytoplasm, cytoskeleton, spindle pole . Cytoplasm, cytoskeleton, spindle . Cell projection, kinocilium . Cell projection, stereocilium . Centrosomal during interphase, released into the cytoplasm at the onset of mitosis. Subsequently localizes to the mitotic spindle pole and at the central spindle (PubMed:12134069, PubMed:11901424, PubMed:15263015). Present along both the transient kinocilia of developing cochlear hair cells and the persistent kinocilia of vestibular hair cells (By similarity). . |
| <b>Tissue Specificity</b>          | Aorta endothelial cell,Brain,Placenta,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |



## Function

catalytic activity: A phosphoprotein + H<sub>2</sub>O = a protein + phosphate., catalytic activity: Protein tyrosine phosphate + H<sub>2</sub>O = protein tyrosine + phosphate., domain: Composed of two structurally equivalent A and B domains that adopt a dual specificity protein phosphatase (DSP) fold., function: Dual-specificity phosphatase. Required for centrosome separation and productive cytokinesis during cell division. May dephosphorylate the APC subunit FZR1/CDH1, thereby promoting APC-FZR1 dependent degradation of mitotic cyclins and subsequent exit from mitosis., similarity: Belongs to the protein-tyrosine phosphatase family. Non-receptor class CDC14 subfamily., subcellular location: Centrosomal during interphase, released into the cytoplasm at the onset of mitosis. Subsequently localizes to the midzone of the mitotic spindle., subunit: Interacts with KIF20A, which is required to localize CDC14 to the midzone

## Background

cell division cycle 14A(CDC14A) Homo sapiens The protein encoded by this gene is a member of the dual specificity protein tyrosine phosphatase family. It is highly similar to Saccharomyces cerevisiae Cdc14, a protein tyrosine phosphatase involved in the exit of cell mitosis and initiation of DNA replication, suggesting a role in cell cycle control. This protein has been shown to interact with, and dephosphorylate tumor suppressor protein p53, and is thought to regulate the function of p53. Alternative splicing of this gene results in several transcript variants encoding distinct isoforms. [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