

Cdc14 Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP8440a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q9UNH5
Other Accession	NP_003663
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB7269
Calculated MW	66574

Additional Information

Gene ID	8556
Other Names	Dual specificity protein phosphatase CDC14A, CDC14 cell division cycle 14 homolog A, CDC14A
Target/Specificity	This Cdc14 antibody is generated from rabbits immunized with a recombinant protein encoding aa 1~379 of human cdc14.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Cdc14 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CDC14A
Function	Dual-specificity phosphatase. Required for centrosome separation and productive cytokinesis during cell division. Dephosphorylates SIRT2 around early anaphase. May dephosphorylate the APC subunit FZR1/CDH1, thereby promoting APC-FZR1 dependent degradation of mitotic cyclins and

subsequent exit from mitosis. Required for normal hearing (PubMed:[29293958](#)).

Cellular Location

Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle pole. Cytoplasm, cytoskeleton, spindle. Cell projection, kinocilium {ECO:0000250|UniProtKB:Q6GQT0}. Cell projection, stereocilium {ECO:0000250|UniProtKB:Q6GQT0}.
Note=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:11901424, PubMed:12134069, PubMed:15263015). Present along both the transient kinocilia of developing cochlear hair cells and the persistent kinocilia of vestibular hair cells (By similarity) {ECO:0000250|UniProtKB:Q6GQT0, ECO:0000269|PubMed:11901424, ECO:0000269|PubMed:12134069, ECO:0000269|PubMed:15263015}

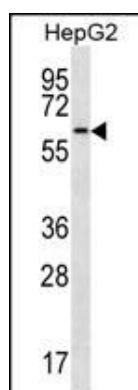
Background

The protein encoded by this gene is a member of the dual specificity protein tyrosine phosphatase family. This protein is highly similar to *Saccharomyces cerevisiae* Cdc14, a protein tyrosine phosphatase involved in the exit of cell mitosis and initiation of DNA replication, which suggests the role in cell cycle control. This protein has been shown to interact with and dephosphorylates tumor suppressor protein p53, and is thought to regulate the function of p53. Alternative splice of this gene results in 3 transcript variants encoding distinct isoforms.

References

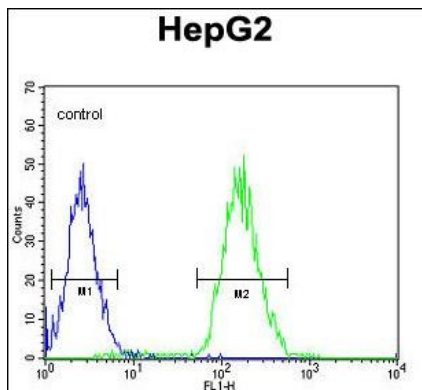
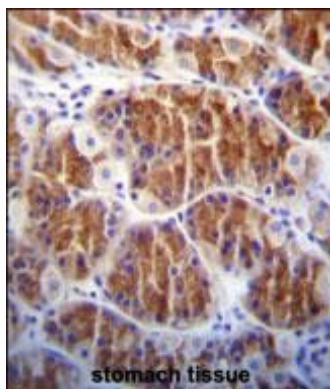
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Wong,A.K., et al. Genomics 59 (2), 248-251 (1999)
Li,L., et al. J. Biol. Chem. 272 (47), 29403-29406 (1997)

Images



His6-cdc14 Antibody (Cat. #AP8440a) western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the cdc14 antibody detected the cdc14 protein (arrow).

Cdc14 Antibody (Cat. #AP8440a) immunohistochemistry analysis in formalin fixed and paraffin embedded human stomach tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of Cdc14 Antibody for immunohistochemistry. Clinical relevance has not been evaluated.



Cdc14 Antibody (Cat. #AP8440a) flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.