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CDC5L Recombinant Rabbit mAb

Catalog # AP97027

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q99459
Other Accession	Q99459
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Recombinant
Calculated MW	92251
Physical State	Liquid
Immunogen	A synthesized peptide derived from human CDC5L
Epitope Specificity	321-388
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	10mM phosphate buffered saline(pH 7.4) with 150mM sodium chloride, 0.05% BSA, 0.02% Proclin300 and 50% glycerol.
SIMILARITY	Belongs to the CEF1 family.Contains 2 HTH myb-type DNA-binding domains.
SUBUNIT	Homodimer. Interacts with DAPK3 (By similarity). Binds DNA. Binds to adeno-pre-mRNA in an ATP-stimulated manner. Belongs to the spliceosome complex. Part of a spliceosomal 'core' complex consisting of CDC5L, PLRG1, SPF27, CCAP1, CCAP3 and CCAP6. Interacts with PLRG1, Lodestar/TTF2, and NIPP1/PPP1R8. Identified in the spliceosome C complex. Component of the PRP19-CDC5L splicing complex composed of a core complex comprising a homotetramer of PRPF19, CDC5L, PLRG1 and BCAS2, and at least three less stably associated proteins CTNNBL1, CWC15 and HSPA8. Interacts (via its C-terminus) directly in the complex with PRPF19 and BCAS2. Interacts (via its C-terminus) directly with PRGL1 (via its WD40 repeat domain); the interaction is required for mRNA splicing but not for spliceosome assembly. Also interacts with CTNNBL1.
Post-translational modifications	Phosphorylated on serine and threonine residues. Phosphorylation on Thr-411 and Thr-438 is required for CDC5L-mediated mRNA splicing. Has no effect on subcellular location nor on homodimerization. Phosphorylated in vitro by CDK2. Phosphorylation enhances interaction with PPP1R8.
DISEASE	Note=A chromosomal aberration involving CDC5L is found in multicystic renal dysplasia. Translocation t(6;19)(p21;q13.1) with USF2.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	DNA-binding protein involved in cell cycle control. May act as a transcription activator. Plays a role in pre-mRNA splicing as core component of precatalytic, catalytic and postcatalytic spliceosomal complexes.

Additional Information

Gene ID	988

Other Names	CDC5L_HUMAN; CDC5L; Cdc5-like protein; Pombe cdc5-related protein; KIAA0432; PCDC5RP; CDC5L_MOUSE; CDC5L_RAT; cell division cycle 5 like; CDC5 (cell division cycle 5, S. pombe, homolog)-like; CDC5 cell division cycle 5-like (S. pombe); cell division cycle 5-like
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:50-200,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	CDC5L
Synonyms	KIAA0432, PCDC5RP
Function	DNA-binding protein involved in cell cycle control. May act as a transcription activator. Plays a role in pre-mRNA splicing as core component of precatalytic, catalytic and postcatalytic spliceosomal complexes (PubMed:11991638, PubMed:20176811, PubMed:28076346, PubMed:28502770, PubMed:29301961, PubMed:29360106, PubMed:29361316, PubMed:30705154, PubMed:30728453). Component of the PRP19-CDC5L complex that forms an integral part of the spliceosome and is required for activating pre-mRNA splicing. The PRP19-CDC5L complex may also play a role in the response to DNA damage (DDR) (PubMed:20176811). As a component of the minor spliceosome, involved in the splicing of U12- type introns in pre-mRNAs (Probable).
Cellular Location	Nucleus. Nucleus speckle. Cytoplasm Note=May shuttle between cytoplasm and nucleus
Tissue Location	Ubiquitously expressed in both fetal and adult tissues.

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