10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Cdc25B Recombinant Rabbit mAb

Catalog # AP100313

Product Information

Application	WB, IP
Primary Accession	P30305
Other Accession	P30305
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Recombinant
Calculated MW	64987
Physical State	Liquid
Immunogen	A synthesized peptide derived from human CDC25B
Epitope Specificity	175-250
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the MPI phosphatase family.Contains 1 rhodanese domain.
SUBUNIT	Interacts with MAPK14 and 14-3-3 proteins.
Post-translational modifications	Phosphorylated by BRSK1 in vitro. Phosphorylated by CHEK1, which inhibits the activity of this protein. Phosphorylation at Ser-353 by AURKA might locally participate in the control of the onset of mitosis. Phosphorylation by MELK at Ser-169 promotes localization to the centrosome and the spindle poles during mitosis. Phosphorylation at Ser-323 and Ser-375 by MAPK14 is required for binding to 14-3-3 proteins.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	CDC25B is a member of the CDC25 family of phosphatases. CDC25B activates the cyclin dependent kinase CDC2 by removing two phosphate groups and it is required for entry into mitosis. CDC25B shuttles between the nucleus and the cytoplasm due to nuclear localization and nuclear export signals.

Additional Information

Gene ID	994
Other Names	MPIP2; MPIP2_HUMAN; CDC25B; Dual specificity phosphatase Cdc25B; 3.1.3.48; CDC25HU2; MPIP2_MOUSE; Cdc25m2; MPIP2_RAT; cell division cycle 25B; CDC25 homolog B (S. pombe); M-phase inducer phosphatase 2
Dilution	WB=1:500-2000,IP=1:20-50,Flow-Cyt=1:50-100
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	CDC25B
Synonyms	CDC25HU2
Function	Tyrosine protein phosphatase which functions as a dosage- dependent inducer of mitotic progression (PubMed:1836978, PubMed:20360007). Directly dephosphorylates CDK1 and stimulates its kinase activity (PubMed:20360007). Required for G2/M phases of the cell cycle progression and abscission during cytokinesis in a ECT2-dependent manner (PubMed:17332740). The three isoforms seem to have a different level of activity (PubMed:1836978).
Cellular Location	Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle pole

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