

Rabbit Anti-phospho-Cdc25B (Ser323) antibody

SL5243R

Product Name:	phospho-Cdc25B (Ser323)
Chinese Name:	磷酸化细胞分裂周期蛋白25B抗体
Alias:	Cdc25B (Phospho-Ser323); Cdc25B (Phospho-S323); p-Cdc25B (Ser323); p-Cdc25B (S323); Cdc 25B; Cdc25b; Cdc-25b; CDC25HU2; Cdc25m2; Cell division cycle 25 homolog B; Cell division cycle 25B; Cell division cycle 25B isoform 1; Cell division cycle 25B isoform 2; Cell division cycle 25B isoform 3; Cell division cycle 25B isoform 4; Cell division cycle 25B isoform 5; Dual specificity phosphatase Cdc25B; M phase inducer phosphatase 2; M-phase inducer phosphatase 2; MPIP2 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	65kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human Cdc25B around the phosphorylation site of Ser323:SP(p-S)MP
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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.
PubMed:	<u>PubMed</u>

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. The protein is nuclear in the M and G1 phases of the cell cycle and moves to the cytoplasm during S and G2. CDC25B has oncogenic properties, although its role in tumor formation has not been determined. Multiple transcript variants for this gene exist. [provided by RefSeq, Jul 2008].

Function:

Tyrosine protein phosphatase which functions as a dosage-dependent inducer of mitotic progression. Required for G2/M phases of the cell cycle progression and abscission during cytokinesis in a ECT2-dependent manner. Directly dephosphorylates CDK1 and stimulates its kinase activity. The three isoforms seem to have a different level of activity.

Subunit:

Interacts with MAPK14 and 14-3-3 proteins.

Subcellular Location:

Cytoplasm, cytoskeleton, centrosome. Cytoplasm, cytoskeleton, spindle pole.

Post-translational modifications:

Product Detail:

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.

Similarity:

Belongs to the MPI phosphatase family.

Contains 1 rhodanese domain.

SWISS:

P30305

Gene ID:

994

Database links:

Entrez Gene: 994Human

Entrez Gene: 12531Mouse

Entrez Gene: 171103Rat

Omim: 116949Human

SwissProt: P30305Human

SwissProt: P30306Mouse

SwissProt: P48966Rat

Unigene: 153752Human

Unigene: 38444 Mouse

Unigene: 11312Rat

Important Note:

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