

# Rabbit Anti-phospho-Cdc25B (Ser149) antibody

# SL8445R

phospho-Cdc25B (Ser149)
磷酸化细胞分裂周期蛋白25B抗体
Cdc25B (Phospho-Ser149); Cdc25B (Phospho-S149); p-Cdc25B (Ser149); p-Cdc25B (S149); 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.
Rabbit
Polyclonal
Human, Mouse, Rat,
WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
65kDa
cytoplasmic
Lyophilized or Liquid
1mg/ml
KLH conjugated synthesised phosphopeptide derived from human Cdc25B around the phosphorylation site of Ser149:FR(p-S)LP
IgG
affinity purified by Protein A
0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
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.
<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:

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:**

P30306

### Gene ID:

12531

#### Database links:

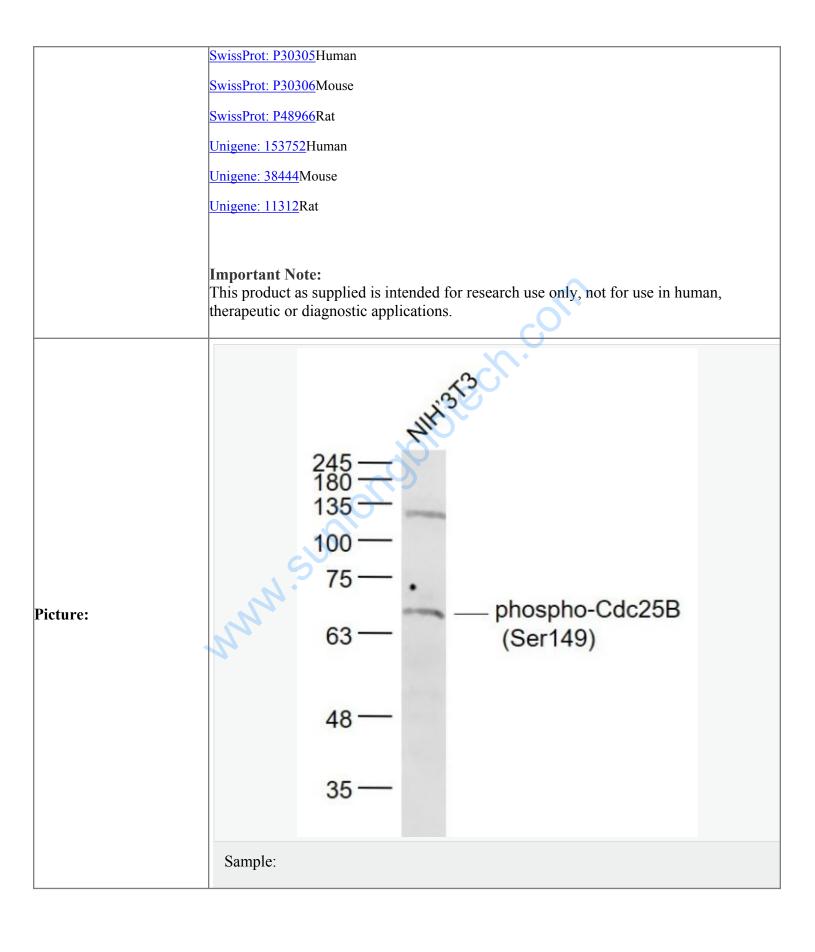
Entrez Gene: 994Human

Entrez Gene: 12531Mouse

Entrez Gene: 171103Rat

Omim: 116949Human

#### Product Detail:



NIH/3T3(Mouse) Cell Lysate at 30 ug

Primary: Anti- phospho-Cdc25B (Ser149) (SL8445R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 65 kD

Observed band size: 67 kD

