

## ARG51837 anti-CDC25B phospho (Ser149) antibody

Package: 100 µl, 50 µl  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes CDC25B phospho (Ser149)
Tested Reactivity	Ms, Rat
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	CDC25B
Species	Mouse
Immunogen	Peptide sequence around phosphorylation site of Serine 149 (F-R-S(p)-L-P) derived from Mouse Cdc25B.
Conjugation	Un-conjugated
Alternate Names	M-phase inducer phosphatase 2; EC 3.1.3.48; Dual specificity phosphatase Cdc25B

### Application Instructions

Application table	Application	Dilution
	WB	1:500 - 1:1000

**Application Note** \* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

### Properties

Form	Liquid
Purification	Antibodies were produced by immunizing rabbits with KLH-conjugated synthetic peptide. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Buffer	PBS (without Mg <sup>2+</sup> and Ca <sup>2+</sup> , pH 7.4), 150mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

### Bioinformation

Database links

[GeneID: 12531 Mouse](#)

[GeneID: 171103 Rat](#)

[Swiss-port # P30306 Mouse](#)

[Swiss-port # P48966 Rat](#)

Gene Symbol

Cdc25b

Gene Full Name

cell division cycle 25B

Background

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.

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 (By similarity). [UniProt]

Research Area

Cancer antibody; Cell Biology and Cellular Response antibody; Gene Regulation antibody

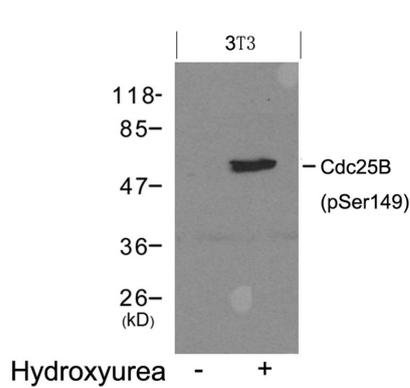
Calculated Mw

65 kDa

PTM

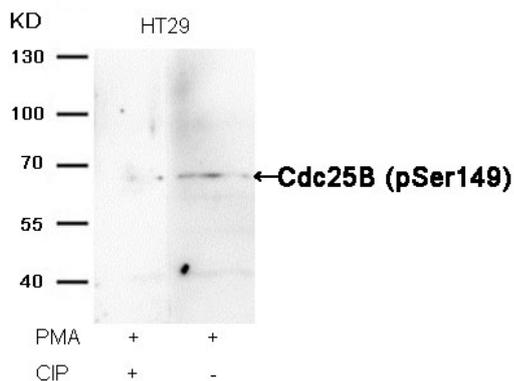
Phosphorylated by BRK1 in vitro. Phosphorylated by CHEK1, which inhibits the activity of this protein. Phosphorylation at Ser-353 by AURKA might locally participate in the control of the onset of mitosis. Phosphorylation by MELK at Ser-169 promotes localization to the centrosome and the spindle poles during mitosis. Phosphorylation at Ser-323 and Ser-375 by MAPK14 is required for binding to 14-3-3 proteins.

Images



ARG51837 anti-CDC25B phospho (Ser149) antibody WB image

Western blot: Extracts from 3T3 cells untreated(lane 1) or treated with Hydroxyurea(lane 2) stained with ARG51837 anti-CDC25B phospho (Ser149) antibody.



ARG51837 anti-CDC25B phospho (Ser149) antibody WB image

Western blot: Extracts from HT29 cells, treated with PMA or calf intestinal phosphatase (CIP), stained with ARG51837 anti-CDC25B phospho (Ser149) antibody.