

ARG66656 anti-CDC25B phospho (Ser323) antibody

Package: 100 μg Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes CDC25B phospho (Ser323)
Tested Reactivity	Hu, Ms
Predict Reactivity	Rat
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	lgG
Target Name	CDC25B
Species	Human
Immunogen	Phosphospecific peptide around Ser323 of Human 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
	IHC-P	1:100
	WB	1:500 - 1:2000
Application Note	IHC-P: Antigen Retrieval: High-pressure and temperature Tris/EDTA buffer (pH 8.0). * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 70 kDa	

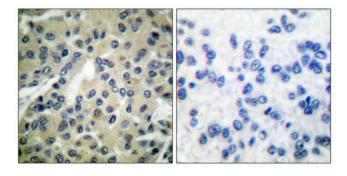
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS, 0.02% Sodium azide, 50% Glycerol and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol and 0.5% BSA
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.

Bioinformation

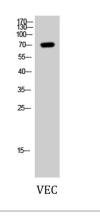
Gene Symbol	CDC25B
Gene Full Name	cell division cycle 25B
Background	CDC25B is a member of the CDC25 family of phosphatases. CDC25B activates the cyclin dependent kinase CDC2 by removing two phosphate groups and it is required for entry into mitosis. CDC25B shuttles between the nucleus and the cytoplasm 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. [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. [UniProt]
Calculated Mw	65 kDa
PTM	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. [UniProt]
Cellular Localization	Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle pole. [UniProt]

Images



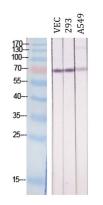
ARG66656 anti-CDC25B phospho (Ser323) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human breast cancer tissue stained with ARG66656 anti-CDC25B phospho (Ser323) antibody at 1:100 dilution, overnight at 4°C. Antigen Retrieval: Highpressure and temperature Tris/EDTA buffer (pH 8.0). Negative control (right): Antibody was pre-absorbed by phospho peptide.



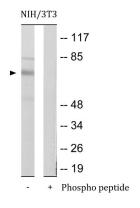
ARG66656 anti-CDC25B phospho (Ser323) antibody WB image

Western blot: VEC cell lysate stained with ARG66656 anti-CDC25B phospho (Ser323) antibody at 1:1000 dilution.



ARG66656 anti-CDC25B phospho (Ser323) antibody WB image

Western blot: VEC, 293 and A549 cell lysates stained with ARG66656 anti-CDC25B phospho (Ser323) antibody at 1:1000 dilution.



ARG66656 anti-CDC25B phospho (Ser323) antibody WB image

Western blot: NIH/3T3 cells treated with PMA (125 ng/ml for 30 min). Cell lysates stained with ARG66656 anti-CDC25B phospho (Ser323) antibody. The lane on the right is blocked with the phospho peptide.