

## ARG51620 anti-CDC25C phospho (Ser216) antibody

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

### Summary

Product Description	Rabbit Polyclonal antibody recognizes CDC25C phospho (Ser216)
Tested Reactivity	Hu
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	CDC25C
Species	Human
Immunogen	Peptide sequence around phosphorylation site of serine 216 (S-P-S(p)-M-P) derived from Human cdc25C.
Conjugation	Un-conjugated
Alternate Names	PPP1R60; M-phase inducer phosphatase 3; CDC25; EC 3.1.3.48; Dual specificity phosphatase Cdc25C

### Application Instructions

Application table	Application	Dilution
	ICC/IF	1:100 - 1:200
	IHC-P	1:50 - 1:100
	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 phosphopeptide. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. In addition, non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
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.

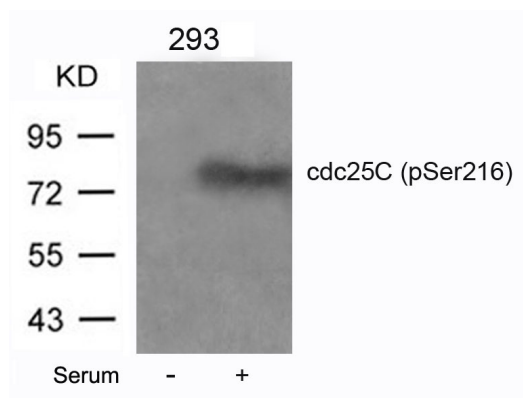
#### Note

For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

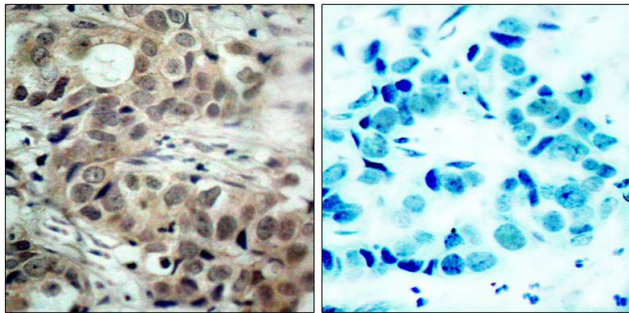
Database links	<a href="#">GeneID: 995 Human</a> <a href="#">Swiss-port # P30307 Human</a>
Gene Symbol	CDC25C
Gene Full Name	cell division cycle 25C
Background	cdc25C is highly conserved during evolution and it plays a key role in the regulation of cell division. The encoded protein is a tyrosine phosphatase and belongs to the Cdc25 phosphatase family. It directs dephosphorylation of cyclin B-bound CDC2 and triggers entry into mitosis. It is also thought to suppress p53-induced growth arrest. Multiple alternatively spliced transcript variants of this gene have been described, however, the full-length nature of many of them is not known.
Function	Functions as a dosage-dependent inducer in mitotic control. Tyrosine protein phosphatase required for progression of the cell cycle. When phosphorylated, highly effective in activating G2 cells into prophase. Directly dephosphorylates CDK1 and activates its kinase activity. [UniProt]
Research Area	Cell Biology and Cellular Response antibody; Gene Regulation antibody
Calculated Mw	53 kDa
PTM	Phosphorylated by CHEK1 and MAPK14 at Ser-216. This phosphorylation creates a binding site for 14-3-3 protein and inhibits the phosphatase. Phosphorylated by PLK4. Phosphorylated by PLK1, leading to activate the phosphatase activity. Phosphorylation by PLK3 at Ser-191 promotes nuclear translocation. Ser-198 is a minor phosphorylation site. Was initially reported to be phosphorylated by PLK3 at Ser-216 (PubMed:10557092). However, such phosphorylation by PLK3 was not confirmed by other groups. Phosphorylation at Thr-48, Thr-67, Ser-122, Thr-130, Ser-168 and Ser-214 occurs at G2 and G2-M transition and is probably catalyzed by CDK1. Ser-168 phosphorylation levels are lower than those at the other 5 CDK1 sites. Phosphorylation by CDK1 leads to increased activity.

## Images



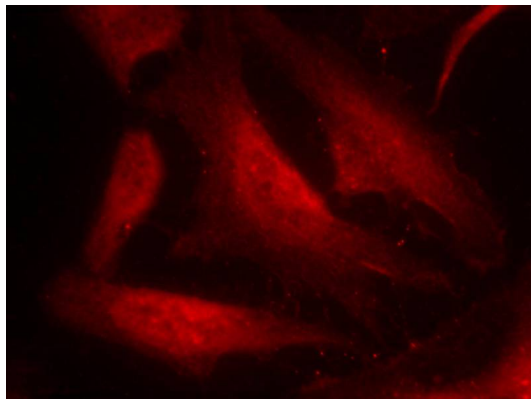
ARG51620 anti-CDC25C phospho (Ser216) antibody WB image

Western blot: Extracts from 293 cells untreated or treated with serum stained with ARG51620 anti-CDC25C phospho (Ser216) antibody.



ARG51620 anti-CDC25C phospho (Ser216) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human breast carcinoma tissue stained with ARG51620 anti-CDC25C phospho (Ser216) antibody (left) or the same antibody preincubated with blocking peptide (right).



ARG51620 anti-CDC25C phospho (Ser216) antibody ICC/IF image

Immunofluorescence: methanol-fixed HeLa cells stained with ARG51620 anti-CDC25C phospho (Ser216) antibody.