

ARG41145 anti-CDC25C antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes CDC25C
Tested Reactivity	Hu
Tested Application	FACS, ICC/IF, IHC-P, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	CDC25C
Species	Human
Immunogen	Synthetic peptide 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
	FACS	1:50
	ICC/IF	1:50 - 1:200
	IHC-P	1:10 - 1:500
	IP	1:30
	WB	1:500 - 1:2000
	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Application Note		
Positive Control	K562	
Observed Size	53 kDa	

Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
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

Gene Symbol	CDC25C
Gene Full Name	cell division cycle 25C
Background	This gene 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. [provided by RefSeq, Jul 2008]
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]
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. [UniProt]
Cellular Localization	Nucleus. [UniProt]

Images



ARG41145 anti-CDC25C antibody WB image

Western blot: K562 cell lysate stained with ARG41145 anti-CDC25C antibody.