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Rabbit Anti-Phospho-cdc25C (Thr48) antibody

SL3482R

Product Name:	Phospho-cdc25C (Thr48)
Chinese Name:	磷酸化细胞分裂周期蛋白25C抗体
Alias:	cdc25C(Phospho-Thr48); cdc25C(Phospho Thr48); cdc25C(Phospho T48); CDC 25; Cdc 25C; CDC25; CDC25C; Cell division cycle 25 homolog C; Cell Division Cycle 25C; Cell Division Cycle 25C; Cell division cycle 25C protein; Dual specificity phosphatase Cdc25C; M phase inducer phosphatase 3; M-phase inducer phosphatase 3; Mitosis inducer CDC25; MPIP3; MPIP3_HUMAN; Phosphotyrosine phosphatase.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	53kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human cdc25C around the phosphorylation site of Thr48:PR(p-T)PV
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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.
PubMed:	PubMed
Product Detail:	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.

Subunit:
Interacts with HIV-1 Vpr, thereby inactivating CDC25C phosphatase activity. Interacts with MAPK14 and 14-3-3 proteins.

Subcellular Location:
Nucleus.

Post-translational modifications:
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.

Similarity:
Belongs to the MPI phosphatase family.
Contains 1 rhodanese domain.

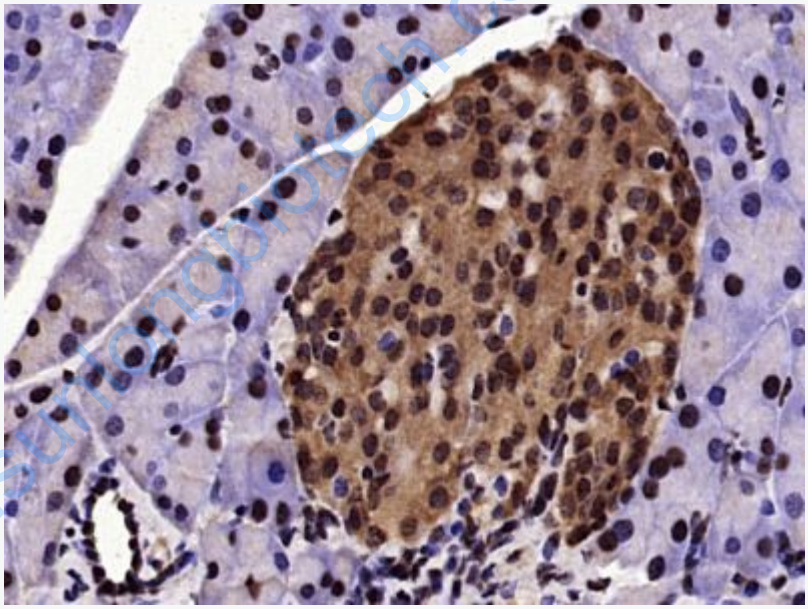
SWISS:
P30307

Gene ID:
995

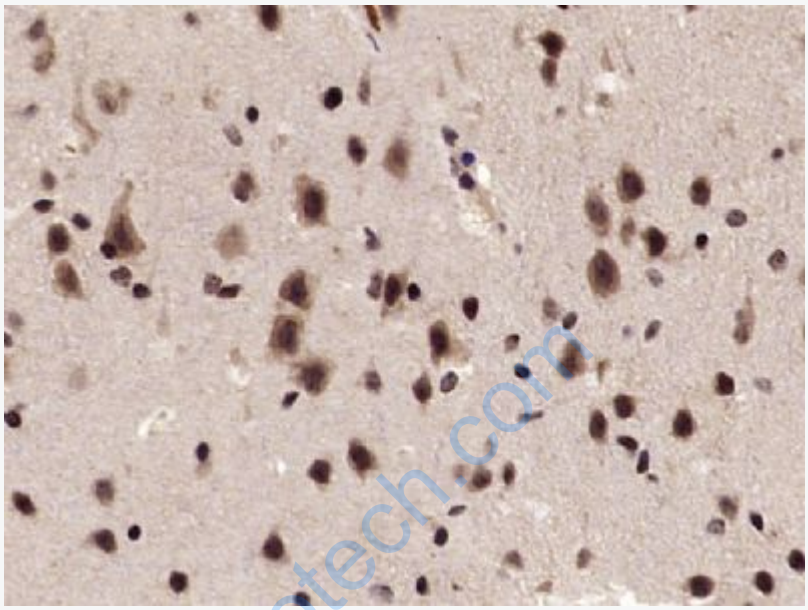
Database links:

Entrez Gene: 995Human

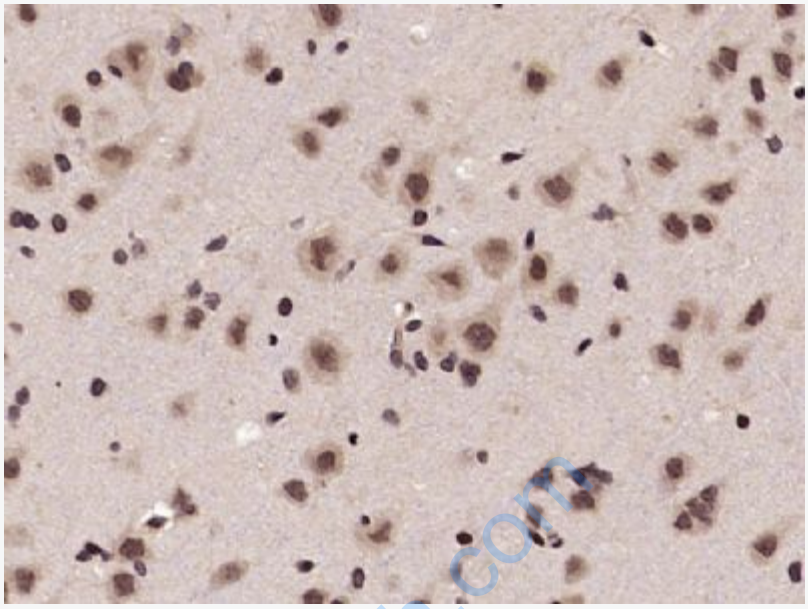
Omim: 157680Human

	SwissProt: P30307Human Unigene: 656Human **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. CDC25家族的组成哺乳动物中CDC25家族一共包括3种同源异构体（CDC25A、CDC25B、CDC25C），约有50%的序列同源，是一组在细胞周期调控中发挥巨大作用的苏/酪氨酸双功能酶 。不同的CDC25家族蛋白在细胞周期中的作用时相亦有差异，CDC25A和CDC25C分别在S期和M期发挥主要作用。
Picture:	 Paraformaldehyde-fixed, paraffin embedded (mouse pancreas tissue); Antigen retrieval by microwave in sodium citratebuffer (pH6.0) ; Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes; Blocking buffer (3%BSA) at RTfor 30min; Antibody incubation with (cdc25C (Thr48)) Polyclonal/MonoclonalAntibody, Unconjugated (SL3482R) at 1:400 overnight at 4℃,followed by conjugation to the secondary antibody (labeled with HRP)and DAB

staining.



Paraformaldehyde-fixed, paraffin embedded (mouse brain tissue); Antigen retrieval by microwave in sodium citratebuffer (pH6.0) ; Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes; Blocking buffer (3%BSA) at RTfor 30min; Antibody incubation with (cdc25C (Thr48)) Polyclonal/MonoclonalAntibody, Unconjugated (SL3482R) at 1:400 overnight at 4℃,followed by conjugation to the secondary antibody (labeled with HRP)and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat brain tissue); Antigen retrieval by microwave in sodium citratebuffer (pH6.0) ; Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes; Blocking buffer (3%BSA) at RTfor 30min; Antibody incubation with (cdc25C (Thr48)) Polyclonal/MonoclonalAntibody, Unconjugated (SL3482R) at 1:400 overnight at 4℃,followed by conjugation to the secondary antibody (labeled with HRP)and DAB staining.