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Datasheet for ABIN3043807  
**anti-CDC25B antibody (AA 119-248)**

3 Images

### Overview

Quantity:	100 µg
Target:	CDC25B
Binding Specificity:	AA 119-248
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

### Product Details

Purpose:	Rabbit IgG polyclonal antibody for M-phase inducer phosphatase 2(CDC25B) detection. Tested with WB, IHC-P in Human,Mouse,Rat.
Immunogen:	E.coli-derived human Cdc25B recombinant protein (Position: M119-L248). Human Cdc25B shares 71% and 68.2% amino acid (aa) sequence identity with mouse and rat Cdc25B, respectively.
Isotype:	IgG
Cross-Reactivity (Details):	Predicted Cross Reactivity: human No cross reactivity with other proteins. Predicted Cross Reactivity: Species predicted to be fit for the product based on sequence similarities.
Characteristics:	Rabbit IgG polyclonal antibody for M-phase inducer phosphatase 2(CDC25B) detection. Tested with WB, IHC-P in Human,Mouse,Rat.

## Product Details

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Gene Name: cell division cycle 25 homolog B (S. pombe)

Protein Name: M-phase inducer phosphatase 2

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Purification: Immunogen affinity purified.

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## Target Details

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Target: CDC25B

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Alternative Name: CDC25B ([CDC25B Products](#))

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Background: Central to the onset of mitosis in all eukaryotic cells is the CDC2 protein kinase, the activity of which is negatively regulated by phosphorylation and positively activated by dephosphorylation. The latter function is carried out by a specific phosphatase, CDC25. At least 3 human CDC25 genes code for the A, B, and C forms of CDC25. CDC25B is mapped to 20p13. P38 kinase has a critical role in the initiation of a G2 delay after ultraviolet radiation. Inhibition of p38 blocks the rapid initiation of this checkpoint in both human and murine cells after ultraviolet radiation. In vitro, p38 binds and phosphorylates CDC25B at serines 309 and 361, and CDC25C at serine-216, phosphorylation of these residues is required for binding to 14-3-3 proteins. In vivo, inhibition of p38 prevents both phosphorylation of CDC25B at serine-309 and 14-3-3 binding after ultraviolet radiation, and mutation of this site is sufficient to inhibit the checkpoint initiation. Regulation of CDC25B phosphorylation by p38 is a critical event for initiating the G2/M checkpoint after ultraviolet radiation.

Synonyms: A1604853 antibody|Cdc 25B antibody|Cdc25b antibody|CDC25B1 antibody|CDC25B2 antibody| CDC25B3 antibody|CDC25HU2 antibody|Cdc25m2 antibody|Cell division cycle 25 homolog B antibody|Cell division cycle 25B antibody|Cell division cycle 25B isoform 1 antibody|Cell division cycle 25B isoform 2 antibody|Cell division cycle 25B isoform 3 antibody|Cell division cycle 25B isoform 4 antibody|Dual specificity phosphatase Cdc25B antibody|EC 3.1.3.48 antibody|M phase inducer phosphatase 2 antibody|M-phase inducer phosphatase 2 antibody|MPIP2\_HUMAN antibody

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Gene ID: 994

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UniProt: [P30305](#)

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Pathways: [Cell Division Cycle, M Phase, Autophagy](#)

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## Application Details

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Application Notes: WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Rat, Predicted Species: Human

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## Application Details

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IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Mouse, Rat, Predicted Species: Human,  
Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for  
20 mins is required for the staining of formalin/paraffin sections.

Notes: Tested Species: Species with positive results. Predicted Species: Species predicted to be  
fit for the product based on sequence similarities. Other applications have not been tested.

Optimal dilutions should be determined by end users.

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Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by  
ABIN921231 in IHC(P).

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Restrictions: For Research Use only

## Handling

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Format: Lyophilized

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Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

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Concentration: 500 µg/mL

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Buffer: Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05 mg Sodium azide.

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Preservative: Sodium azide

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Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which  
should be handled by trained staff only.

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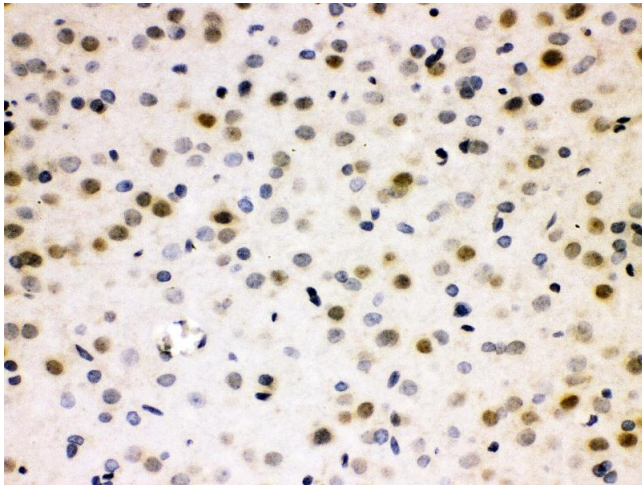
Handling Advice: Avoid repeated freezing and thawing.

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Storage: 4 °C/-20 °C

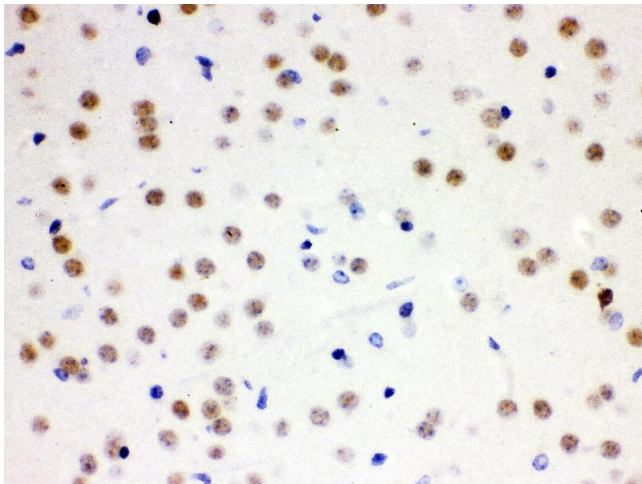
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Storage Comment: At -20°C for one year. After reconstitution, at 4°C for one month.  
It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing  
and thawing.



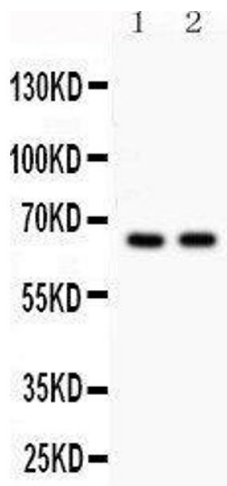
#### Immunohistochemistry

**Image 1.** Anti- Cdc25B Picoband antibody, IHC(P) IHC(P):  
Rat Brain Tissue



#### Immunohistochemistry

**Image 2.** Anti- Cdc25B Picoband antibody, IHC(P) IHC(P):  
Mouse Brain Tissue



#### Western Blotting

**Image 3.** Anti- Cdc25B Picoband antibody, Western blotting  
All lanes: Anti Cdc25B at 0.5ug/ml Lane 1: Rat Liver Tissue  
Lysate at 50ug Lane 2: Rat Testis Tissue Lysate at 50ug  
Predicted bind size: 65KD Observed bind size: 65KD