

#4688 Store at -20C

## cdc25C (5H9) Rabbit mAb


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**For Research Use Only. Not for Use in Diagnostic Procedures.**

| Applications:<br>WB | Reactivity:<br>H | Sensitivity:<br>Endogenous | MW (kDa):<br>60, 75 | Source/Isotype:<br>Rabbit IgG | UniProt ID:<br>#P30307 | Entrez-Gene Id:<br>995 |
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| <b>Product Usage Information</b> | <b>Application</b><br>Western Blotting  | <b>Dilution</b><br>1:1000 |
| <b>Storage</b>                   | Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.  |                           |
| <b>Specificity / Sensitivity</b> | cdc25C (5H9) Rabbit mAb detects endogenous levels of total cdc25C protein.  |                           |
| <b>Source / Purification</b>     | Monoclonal antibody is produced by immunizing animals with a cdc25C full length fusion protein.   |                           |
| <b>Background</b>                | Cdc25 is a protein phosphatase responsible for dephosphorylating and activating cdc2, a crucial step in regulating the entry of all eukaryotic cells into mitosis (1). cdc25C is constitutively phosphorylated at Ser216 throughout interphase by c-TAK1, while phosphorylation at this site is DNA damage-dependent at the G2/M checkpoint (2). When phosphorylated at Ser216, cdc25C binds to members of the 14-3-3 family of proteins, sequestering cdc25C in the cytoplasm and thereby preventing premature mitosis (3). The checkpoint kinases Chk1 and Chk2 phosphorylate cdc25C at Ser216 in response to DNA damage (4,5). |                           |
| <b>Background References</b>     | 1. Jesus, C. and Ozon, R. (1995) <i>Prog. Cell Cycle Res.</i> 1, 215-228.<br>2. Peng, C.Y. et al. (1997) <i>Science</i> 277, 1501-1505.<br>3. Kumagai, A. and Dunphy, W.G. (1999) <i>Genes Dev.</i> 13, 1067-1072.<br>4. Blasina, A. et al. (1999) <i>Curr. Biol.</i> 9, 1-10.<br>5. Furnari, B. et al. (1999) <i>Mol. Biol. Cell</i> 10, 833-845.  |                           |

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| <b>Species Reactivity</b>     | Species reactivity is determined by testing in at least one approved application (e.g., western blot).   |
| <b>Western Blot Buffer</b>    | IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.   |
| <b>Applications Key</b>       | <b>WB:</b> Western Blotting  |
| <b>Cross-Reactivity Key</b>   | <b>H:</b> human <b>M:</b> mouse <b>R:</b> rat <b>Hm:</b> hamster <b>Mk:</b> monkey <b>Vir:</b> virus <b>Mi:</b> mink <b>C:</b> chicken <b>Dm:</b> D. melanogaster<br><b>X:</b> Xenopus <b>Z:</b> zebrafish <b>B:</b> bovine <b>Dg:</b> dog <b>Pg:</b> pig <b>Sc:</b> S. cerevisiae <b>Ce:</b> C. elegans <b>Hr:</b> horse<br><b>GP:</b> Guinea Pig <b>Rab:</b> rabbit <b>All:</b> all species expected   |
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