

## CDK1/CDC2 (Phospho-Thr14) Antibody

Catalog No: #11997

Package Size: #11997-1 50ul #11997-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

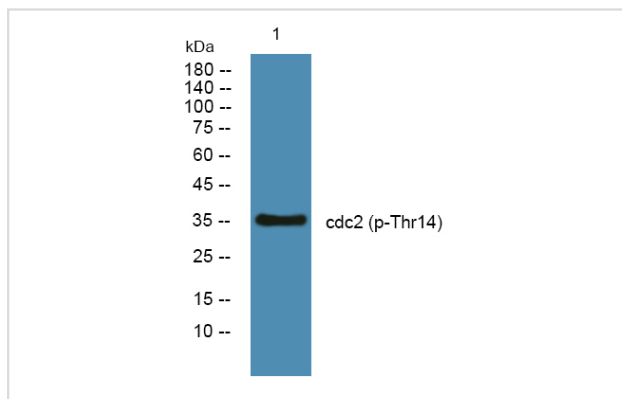
## Description

|                       |                                                                                                                                                                                                                                                                                      |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name          | CDK1/CDC2 (Phospho-Thr14) Antibody                                                                                                                                                                                                                                                   |
| Host Species          | Rabbit                                                                                                                                                                                                                                                                               |
| Clonality             | Polyclonal                                                                                                                                                                                                                                                                           |
| Purification          | Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide. |
| Applications          | WB                                                                                                                                                                                                                                                                                   |
| Species Reactivity    | Hu Ms Rt                                                                                                                                                                                                                                                                             |
| Specificity           | The antibody detects endogenous level of CDK1/CDC2 only when phosphorylated at threonine 14.                                                                                                                                                                                         |
| Immunogen Type        | Peptide-KLH                                                                                                                                                                                                                                                                          |
| Immunogen Description | Peptide sequence around phosphorylation site of threonine14(E-G-T(p)-Y-G) derived from Human CDK1/CDC2 .                                                                                                                                                                             |
| Target Name           | CDK1/CDC2                                                                                                                                                                                                                                                                            |
| Modification          | Phospho                                                                                                                                                                                                                                                                              |
| Other Names           | CDC28; CDC2A; CDK1; MPF; kinase Cdc2                                                                                                                                                                                                                                                 |
| Accession No.         | Swiss-Prot#: P06493NCBI Gene#: 983NCBI mRNA#oO NM_001170406.1NCBI Protein#oO NP_001163877.1                                                                                                                                                                                          |
| Uniprot               | P06493                                                                                                                                                                                                                                                                               |
| GeneID                | 983;                                                                                                                                                                                                                                                                                 |
| SDS-PAGE MW           | 34kd                                                                                                                                                                                                                                                                                 |
| Concentration         | 1.0mg/ml                                                                                                                                                                                                                                                                             |
| Formulation           | Rabbit IgG in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.                                                                                                                                   |
| Storage               | Store at -20°C/1 year                                                                                                                                                                                                                                                                |

## Application Details

Western blotting: 1:500~1:1000

## Images



Western blot analysis of lysates from SH-SY5Y cells, primary antibody was diluted at 1:1000, 4° over night

## Background

Serine/threonine-protein kinase involved in the control of the cell cycle; essential for meiosis, but dispensable for mitosis. Phosphorylates CTNNB1, USP37, p53/TP53, NPM1, CDK7, RB1, BRCA2, MYC, NPAT, EZH2. Interacts with cyclins A, B1, B3, D, or E. Triggers duplication of centrosomes and DNA. Acts at the G1-S transition to promote the E2F transcriptional program and the initiation of DNA synthesis, and modulates G2 progression; controls the timing of entry into mitosis/meiosis by controlling the subsequent activation of cyclin B/CDK1 by phosphorylation, and coordinates the activation of cyclin B/CDK1 at the centrosome and in the nucleus.

Sarkar S, Dey BK, Dutta A (2010) Mol Biol Cell 21, 2138-49

Shreeram S, Hee WK, Bulavin DV (2008) Mol Cell Biol 28, 7442-50

Mayya V, et al. (2006) Mol Cell Proteomics 5, 1146-57

Note: This product is for in vitro research use only