

CDK2 acetate(255064-79-0 free base)

## Chemical Properties

CAS No. :

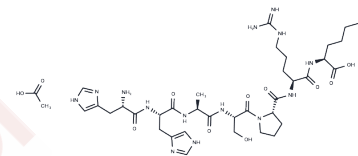
Formula: C37H61N15O11

Molecular Weight: 891.99

Keep away from moisture

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

|               |  |
|---------------|--|
| Description   | CDK2 acetate is a member of the eukaryotic S/T protein kinase family and its function is to catalyze the phosphoryl transfer of ATP $\gamma$ -phosphate to serine or threonine hydroxyl (denoted as S0/T0) in a protein substrate.   |
| Targets(IC50) | Others   |
| In vitro      | CDK2 (Cyclin-dependent kinase 2) is a member of the eukaryotic S/T protein kinase family and its function is to catalyze the phosphoryl transfer of ATP $\gamma$ -phosphate to serine or threonine hydroxyl (denoted as S0/T0) in a protein substrate. The fully active CDK2 is in complex with HHASPRK (an optimal peptide substrate), namely interactions of CDK2 with peptide substrate and the dynamics of the G-loop. CDK2 participates in eukaryotic cell cycle regulation at the G1/S boundary. CDK2 deregulation has been proved to occur in tumor cells, evoking a strong interest in artificial and native inhibitors. CDK2 activity is tightly regulated by a complex mechanism, including a positive regulatory subunit binding, and phosphorylations at positive and/or negative regulatory sites[1]. |

## Preparing Stock Solutions

|       | 1mg       | 5mg       | 10mg       |
|-------|-----------|-----------|------------|
| 1 mM  | 1.1211 mL | 5.6054 mL | 11.2109 mL |
| 5 mM  | 0.2242 mL | 1.1211 mL | 2.2422 mL  |
| 10 mM | 0.1121 mL | 0.5605 mL | 1.1211 mL  |
| 50 mM | 0.0224 mL | 0.1121 mL | 0.2242 mL  |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Bártová I, The mechanism of inhibition of the cyclin-dependent kinase-2 as revealed by the molecular dynamics study on the complex CDK2 with the peptide substrate HHASPRK. Protein Sci. 2005 Feb;14(2):445-51.

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