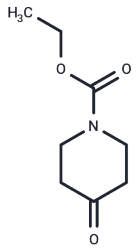
# Data Sheet (Cat.No.T1340)

TargetMol

## N-Carbethoxy-4-piperidone

### Chemical Properties



CAS No. : 29976-53-2

Formula: C8H13NO3

Molecular Weight: 171.19

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 | N-Carbethoxy-4-piperidone is an aminopyrimidine derivative, compositions containing them and there served as pharmaceuticals. |
| Targets(IC50) | Others,Drug Metabolite |
| Kinase Assay | A crude cell-free extract is isolated from LI 210 cells in culture by suspension of the cells in a given volume of 0.05mol/LTris-HCl buffer, pH 7.4, and sonic extraction with a Biosonik at 70% maximal output for 30 sec. The supernatant is collected after centrifugation at 105,000 × g for 60 min (4°C) in a Model L Spinco ultracentrifuge. The final protein concentration of the cell-free extracts is approximately 3 mg/mL. The extracts are used as the source of enzymes. Ribonucleotide reductase activity is measured. A unit of enzyme is defined as the amount that catalyzed dCMP synthesis at a rate of 1 mμmole/hr. The assay systems for the measurement of pyrimidine nucleoside (CR) and deoxynucleoside (TdR, CdR) kinases are essentially those described by Chu and Fischer. However, reactions are terminated by heating for 2 min in a boiling water bath, and the phosphorylated derivatives are isolated according to the method of Bach. Fifty-jul aliquots are applied to 1-inch discs of diethylaminoethyl paper, which are then placed in counting vials and eluted with 0.5 mL of 0.5 mol/LPCA. After 1 hr, 12 mL of Diotol are added, and the radioactivity is determined. |

### Solubility Information

| | |
|---|---|
| Solubility | DMSO: 60 mg/mL (350.49 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 5.8415 mL | 29.2073 mL | 58.4146 mL |
| 5 mM | 1.1683 mL | 5.8415 mL | 11.6829 mL |
| 10 mM | 0.5841 mL | 2.9207 mL | 5.8415 mL |
| 50 mM | 0.1168 mL | 0.5841 mL | 1.1683 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

Eric Gundersen et al.Bioorganic & Medicinal Chemistry Letters, 15(7), 1891-1894 (2005)