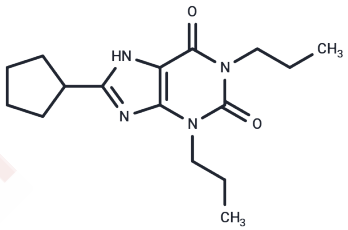
Data Sheet (Cat.No.T22744)

TargetMol

DPCPX

Chemical Properties



CAS No. : 102146-07-6

Formula: C16H24N4O2

Molecular Weight: 304.39

Storage: Keep away from moisture
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	DPCPX (PD 116948) is an A1 adenosine receptor antagonist
Targets(IC50)	Adenosine Receptor
In vivo	DPCPX, a selective adenosine A1 receptor antagonist, enhances the antidepressant-like effects of imipramine, escitalopram, and reboxetine in mice behavioral tests

Solubility Information

Solubility	Ethanol: < 1 mg/mL (insoluble or slightly soluble), DMSO: 10.6 mg/mL (34.82 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2853 mL	16.4263 mL	32.8526 mL
5 mM	0.6571 mL	3.2853 mL	6.5705 mL
10 mM	0.3285 mL	1.6426 mL	3.2853 mL
50 mM	0.0657 mL	0.3285 mL	0.6571 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

Aleksandra S , Ewa P , Karolina B , et al. DPCPX, a selective adenosine A1 receptor antagonist, enhances the antidepressant-like effects of imipramine, escitalopram, and reboxetine in mice behavioral tests[J]. Naunyn-Schmiedeberg's Archives of Pharmacology, 2018:1-11.

Chen J, Li T, Huang D, et al.Integrating UHPLC-MS/MS quantitative analysis and exogenous purine supplementation to elucidate the antidepressant mechanism of Chaigui granules by regulating purine metabolism.Journal of Pharmaceutical Analysis.2023

Zhou Y , Tong L , Chu X , et al. The Adenosine A1 Receptor Antagonist DPCPX Inhibits Tumor Progression via the ERK/JNK Pathway in Renal Cell Carcinoma[J]. Cellular Physiology & Biochemistry International Journal of Experimental Cellular Physiology Biochemistry & Pharmacology, 2017, 43(2):733.