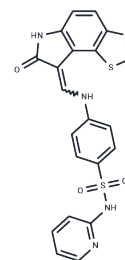


GW8510

## Chemical Properties

CAS No. : 222036-17-1  
 Formula: C<sub>21</sub>H<sub>15</sub>N<sub>5</sub>O<sub>3</sub>S<sub>2</sub>  
 Molecular Weight: 449.51  
 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	GW8510 is a CDK2 (cell cycle protein-dependent kinase 2) inhibitor and RRM2 (Ribonucleotide Reductase Regulatory Subunit M2) inhibitor that affects DNA synthesis and antiproliferation in tumor cells. In mammalian aging models, GW851 improves cognition and prolongs lifespan, which may be related to the modulation of the expression of cell cycle-related protein p21 and CDK family genes, as well as the improvement of mitochondrial function.
Targets(IC50)	CDK,DNA/RNA Synthesis
In vitro	GW8510 (0.206, 0.413, 0.825, 1.65, 3.3μM, 5 days) treatment-treated mouse pancreatic α cell line αTC1 clone 6 (αTC1.6) observed dose-dependent induction of Ins2 expression after treatment. [4]

## Solubility Information

Solubility	DMSO: 20 mg/mL (44.49 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2246 mL	11.1232 mL	22.2464 mL
5 mM	0.4449 mL	2.2246 mL	4.4493 mL
10 mM	0.2225 mL	1.1123 mL	2.2246 mL
50 mM	0.0445 mL	0.2225 mL	0.4449 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

ARCAMONE F, et, al. STRUCTURE AND SYNTHESIS OF DISTAMYCIN A. Nature. 1964 Sep 5;203:1064-5.

Hiraku Y, et, al. Distamycin A, a minor groove binder, changes enediyne-induced DNA cleavage sites and enhances apoptosis. Nucleic Acids Res Suppl. 2002;(2):95-6.

Majumder P, et, al. Effect of DNA groove binder distamycin A upon chromatin structure. PLoS One. 2011;6(10):e26486.

Fomina-Yadlin D, et al. GW8510 increases insulin expression in pancreatic alpha cells through activation of p53 transcriptional activity. PLoS One. 2012;7(1):e28808.

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