

BRD0209

Chemical Properties

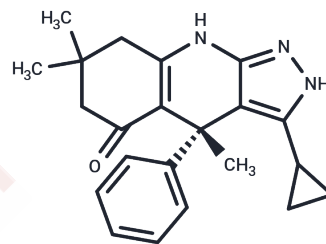
CAS No. : 1597439-87-6

Formula: C₂₂H₂₅N₃O

Molecular Weight: 347.45

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	BRD0209 is a highly selective and potent GSK3 inhibitor.
Targets(IC50)	GSK-3
In vitro	BRD0209 showed concentration-dependent inhibition of Tau with cellular EC50s of 1.76 μ M, respectively, in SH-SY5Y cells using ELISA. Treatment of SH-SY5Y cells with BRD0209 (10 μ M) significantly inhibited GSK3 kinase activity within 30 min, as seen in the decrease in phospho-CRMP2 and phospho- β -catenin. BRD0209 is also a reversible ATP-competitive inhibitor with fast-off kinetics (K_i = 4.2 nM, respectively). BRD0209 treatment caused a dramatic decrease in autophosphorylation at Tyr279 (pGSK3 α) and Tyr216 (pGSK3 β) with longer exposure (24 h) [1].

Solubility Information

Solubility	DMSO: 3.48 mg/mL (10.02 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 1 mg/mL (2.88 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8781 mL	14.3906 mL	28.7811 mL
5 mM	0.5756 mL	2.8781 mL	5.7562 mL
10 mM	0.2878 mL	1.4391 mL	2.8781 mL
50 mM	0.0576 mL	0.2878 mL	0.5756 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

Wagner FF, et al. Inhibitors of Glycogen Synthase Kinase 3 with Exquisite Kinome-Wide Selectivity and Their Functional Effects. ACS Chem Biol. 2016 Jul 15;11(7):1952-63.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481