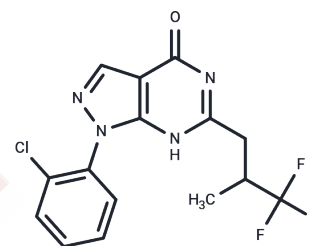


BAY 73-6691 racemate

Chemical Properties

CAS No. :	794568-90-4
Formula:	C ₁₅ H ₁₂ ClF ₃ N ₄ O
Molecular Weight:	356.73
Storage:	Store at low temperature Powder: -20°C for 3 years In solvent: -80°C for 1 year <i>Actual storage temperature shall be subject to the COA.</i>



Biological Description

Description	BAY 73-6691 racemate (Rac-BAY 73-6691) is a phosphodiesterase 9A (PDE9A) inhibitor used for research in Parkinson's disease.
Targets(IC50)	PDE
In vitro	The BAY 73-6691 racemate is the BAY 73-6691 racemate. Treatment with BAY 73-6691 (50, 100, 150, and 200µg/mL) attenuated the cytotoxicity and oxidative stress of Aβ ₂₅₋₃₅ -induced SH-SY5Y cells. [3]
In vivo	BAY 73-6691 (1 mg/kg/ day and 5 mg/kg/ day) for 95 days. The 5/6Nx rats developed albuminuria, decreased serum creatinine clearance (Ccr), and increased serum troponin T levels. [2] In A mouse model, BAY 73-6691 (intraperitoneal injection) protected hippocampal neurons from oxidative damage induced by Aβ ₂₅₋₃₅ . [3]

Solubility Information

Solubility	DMSO: 80 mg/mL (224.26 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: 5 mg/mL (14.02 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	2.8032 mL	14.0162 mL	28.0324 mL
5 mM	0.5606 mL	2.8032 mL	5.6065 mL
10 mM	0.2803 mL	1.4016 mL	2.8032 mL
50 mM	0.0561 mL	0.2803 mL	0.5606 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

Liza Leventhal, et al. Phosphodiesterase 9 inhibitor and levodopa therapy. WO 2017070293 A1.

Chen X, et al. Renal and cardiac effects of the PDE9 inhibitor BAY 73-6691 in 5/6 nephrectomized rats. Pflugers Arch. 2024 May;476(5):755-767.

Li J, et al. Protective effects of BAY 73-6691, a selective inhibitor of phosphodiesterase 9, on amyloid- β peptides-induced oxidative stress in in-vivo and in-vitro models of Alzheimer's disease. Brain Res. 2016 Jul 1;1642:327-335.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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