

BAY 73-6691

Catalog No: tcsc0025654



Available Sizes

Size: 5mg

Size: 10mg

Size: 25mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

794568-92-6

Formula:

$C_{15}H_{12}ClF_3N_4O$

Pathway:

Metabolic Enzyme/Protease

Target:

Phosphodiesterase (PDE)

Purity / Grade:

>98%

Solubility:

DMSO : 160 mg/mL (448.52 mM; Need ultrasonic and warming)

Alternative Names:

(R)-BAY 73-6691

Observed Molecular Weight:

356.73

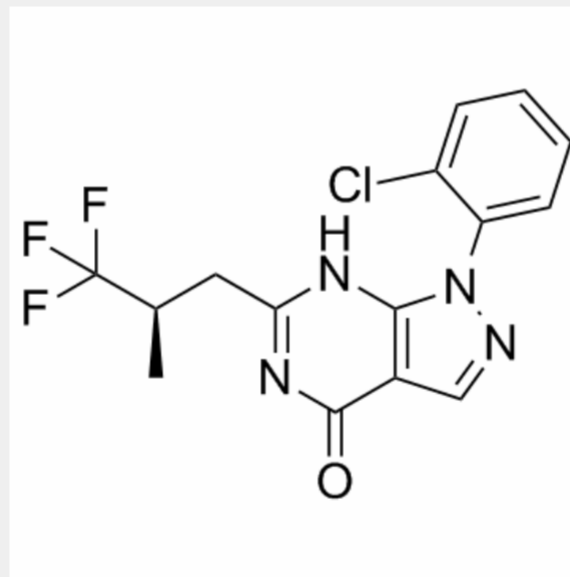
Product Description

BAY 73-6691 is a potent, selective brain penetrant **PDE9A** inhibitor.

IC50 & Target: PDE9A^[1]

In Vitro: The BAY 73-6691 dose-dependently alleviates cell viability loss due to A β_{25-35} treatment. It is found that when SH-SY5Y cells are cultured by A β_{25-35} , a high degree of cell apoptosis is observed, while additional stimulation with BAY 73-6691 causes attenuation of cell apoptosis. BAY 73-6691 dose-dependently attenuates oxidative stress induced by A β_{25-35} , and BAY 73-6691 at 200 μ g/mL almost neutralizes A β_{25-35} -induced oxidative damage. The BAY 73-6691 attenuates A β_{25-35} -induced increase of apoptosis cells^[1].

In Vivo: BAY 73-6691 dose-dependently improves the acquisition performance in the A β_{25-35} -injected mice on days 7 to 10 (day 7, $F_{(5,54)}=65.153$; day 8, $F_{(5,54)}=62.340$; day 9, $F_{(5,54)}=37.529$; day 10, $F_{(5,54)}=38.624$; P25-35-induced decrease of the dwell time on the 10th day post A β_{25-35} injection (day 10, $F_{(5,54)}=27.360$, P25-35 injection and BAY 73-6691 treatment cause no influence on the swimming speed. Treatment with BAY 73-6691 does not cause detectable alteration of spatial memory in sham mice. BAY 73-6691 alleviates A β_{25-35} -induced abnormalities of the above indices. The BAY 73-6691 causes no influence on the four indices mentioned above in sham mice. The BAY 73-6691 has no significant effect on the apoptosis of hippocampal neurons in sham mice^[1].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!