



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 ₃ N ₄ O
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 $A\beta_{25-35}$ treatment. It is found that when SH-SY5Y cells are cultured by $A\beta_{25-35}$, 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 $A\beta_{25-35}$, and BAY 73-6691 at 200 µg/mL almost neutralizes $A\beta_{25-35}$ -induced oxidative damage. The BAY 73-6691 attenuates $A\beta_{25-35}$ -induced increase of apoptosis cells^[1].

In Vivo: BAY 73-6691 dose-dependently improves the acquisition performance in the $A\beta_{25-35}$ -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 $A\beta_{25-35}$ 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 $A\beta_{25-35}$ -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.

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