

# 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

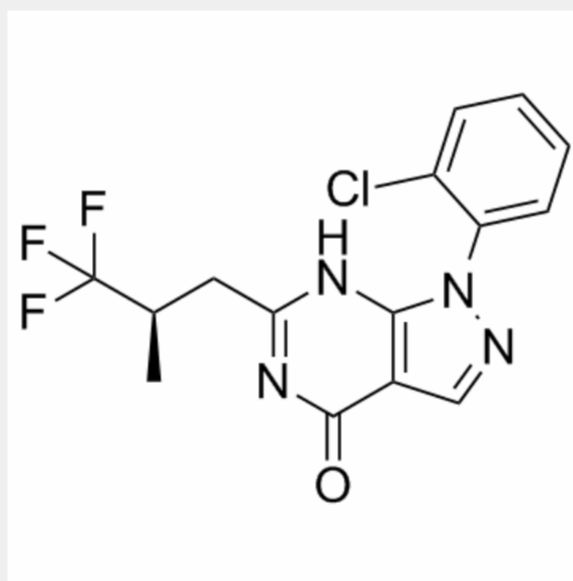
## Product Description

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

IC<sub>50</sub> & Target: PDE9A<sup>[1]</sup>

**In Vitro:** The BAY 73-6691 dose-dependently alleviates cell viability loss due to A $\beta$ <sub>25-35</sub> treatment. It is found that when SH-SY5Y cells are cultured by A $\beta$ <sub>25-35</sub>, 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 $\beta$ <sub>25-35</sub>, and BAY 73-6691 at 200  $\mu$ g/mL almost neutralizes A $\beta$ <sub>25-35</sub>-induced oxidative damage. The BAY 73-6691 attenuates A $\beta$ <sub>25-35</sub>-induced increase of apoptosis cells<sup>[1]</sup>.

**In Vivo:** BAY 73-6691 dose-dependently improves the acquisition performance in the A $\beta$ <sub>25-35</sub>-injected mice on days 7 to 10 (day 7, F<sub>(5,54)</sub>=65.153; day 8, F<sub>(5,54)</sub>=62.340; day 9, F<sub>(5,54)</sub>=37.529; day 10, F<sub>(5,54)</sub>=38.624; P25-35-induced decrease of the dwell time on the 10th day post A $\beta$ <sub>25-35</sub> injection (day 10, F<sub>(5,54)</sub>=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 $\beta$ <sub>25-35</sub>-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<sup>[1]</sup>.



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