Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Capadenoson

Catalog No: tcsc1228

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
544417-40-5

Formula:
$C_{25}H_{18}ClN_5O_2S_2$

Pathway:
GPCR/G Protein

Target:
Adenosine Receptor

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 50 mg/mL (96.15 mM); H2O :

Alternative Names:
BAY 68-4986

Observed Molecular Weight:
520.03

Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Product Description

Capadenoson is a selective agonist of **adenosine-A1 receptor**.

IC50 & Target: Adenosine A1 receptor[1]

In Vitro: To further elucidate the pharmacological properties of Capadenson, GTP shift assays are performed with the standard full A1-agonist CCPA and the A1-antagonist 8-cyclopentyl-1,3-dipropylxanthine (DPCPX). CCPA shows a K_i value of 4.2 nM in the binding assay on rat cortical brain membranes. In the presence of 1 mM GTP this K_i value shifts to a value of 64 nM. Therefore the GTP shift for CCPA is 15. DPCPX shows a GTP shift of 1 with virtually identical K_i values in the absence and presence of GTP. Capadenson shows a K_i value of 24 nM in the binding assay. In the presence of 1 mM GTP this K_i value shifts to a value of 116 nM resulting in a GTP shift of 5 for Capadenoson[1].

In Vivo: In the in vivo experiments, Wistar rats and SHR are pre-treated with Capadenoson at a concentration of 0.15 mg/kg for 5 days. On day 5, a stress test (physical restraint) is performed for 2 hours. The plasma concentration of Capadenoson measured 3 hours after drug intake remains constant in the 5 days prior to the restraint stress test and averaged 7.63 µg/L on day 4 and 5, respectively[1].