

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

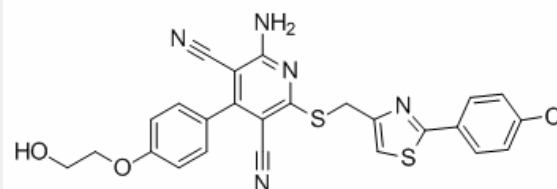
Product Description

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

IC50 & Target: Adenosine A1 receptor^[1]

In Vitro: To further elucidate the pharmacological properties of Capadenoson, 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. Capadenoson 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].



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