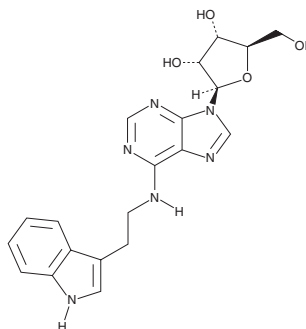


PRODUCT INFORMATION



A_{2A}R Agonist-1 Item No. 28414

CAS Registry No.: 41552-95-8
Formal Name: N-[2-(1H-indol-3-yl)ethyl]-adenosine
Synonym: JMF 1907
MF: C₂₀H₂₂N₆O₄
FW: 410.4
Purity: ≥98%
UV/Vis.: λ_{max}: 272, 364 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

A_{2A}R agonist-1 is supplied as a solid. A stock solution may be made by dissolving the A_{2A}R agonist-1 in the solvent of choice, which should be purged with an inert gas. A_{2A}R agonist-1 is soluble in the organic solvent DMSO at a concentration of approximately 10 mM.

Description

A_{2A}R agonist-1 is an agonist of the adenosine A_{2A} receptor and an inhibitor of equilibrative nucleoside transporter 1 (ENT1; K_s = 4.39 and 3.47 μM for the human receptor and guinea pig transporter, respectively).¹ It decreases adenosine uptake by 80% in PC12 cells when used at a concentration of 61 μM and increases brain levels of adenosine in a transgenic mouse model of Huntington's disease when administered at a dose of 20 mg/kg.² A_{2A}R agonist-1 (0.11 mg/kg) also rescues motor performance and increases survival in a transgenic mouse model of Huntington's disease.

References

1. Chen, J.-B., Liu, E.M., Chern, T.-R., *et al.* Design and synthesis of novel dual-action compounds targeting the adenosine A(2A) receptor and adenosine transporter for neuroprotection. *Chem. Med. Chem.* **6(8)**, 1390-1400 (2011).
2. Kao, Y.H., Lin, M.S., Chen, C.M., *et al.* Targeting ENT1 and adenosine tone for the treatment of Huntington's disease. *Hum. Mol. Genet.* **26(3)**, 467-478 (2017).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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