

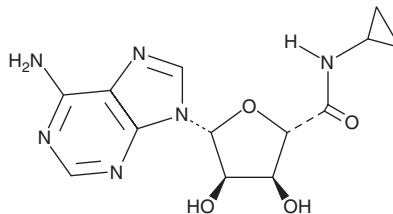
PRODUCT INFORMATION



5'-(N-Cyclopropyl)carboxamidoadenosine

Item No. 18157

CAS Registry No.: 50908-62-8
Formal Name: 1-(6-amino-9H-purin-9-yl)-N-cyclopropyl-1-deoxy-β-D-ribofuranuronamide
Synonym: CPCA
MF: C₁₃H₁₆N₆O₄
FW: 320.3
Purity: ≥95%
UV/Vis.: λ_{max}: 259 nm
Supplied as: A crystalline 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

CPCA is supplied as a crystalline solid. A stock solution may be made by dissolving the CPCA in the solvent of choice, which should be purged with an inert gas. CPCA is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of CPCA in these solvents is approximately 2, 14, and 25 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of CPCA can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of CPCA in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

CPCA is a specific adenosine A₂ receptor agonist with antipyretic and anticonvulsant activity.^{1,2} It stimulates the production of cyclic AMP in CHO-K1 cells with an EC₅₀ value of 5.3 μM.³

References

1. Gagalo, I.T. and Matuszek, M.T. The effect of N⁶-cyclohexyladenosine and 5'-(N-cyclopropyl)-carboxamidoadenosine on pyrogen fever in rabbits. *Ann. N. Y. Acad. Sci.* **813**(1), 353-359 (1997).
2. Huber, A., Güttinger, M., Möhler, H., *et al.* Seizure suppression by adenosine A_{2A} receptor activation in a rat model of audiogenic brainstem epilepsy. *Neurosci. Lett.* **329**, 289-292 (2002).
3. de Zwart, M., Link, R., von Frijtag Drabbe Künzel, J.K., *et al.* A functional screening of adenosine analogues at the adenosine A_{2B} receptor: A search for potent agonists. *Nucleosides Nucleotides* **17**(6), 969-985 (1998).

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.

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