PRODUCT INFORMATION



2'-MeCCPA

Item No. 30935

CAS Registry No.: 205171-12-6

Formal Name: 2-chloro-N-cyclopentyl-2'-C-methyl-adenosine

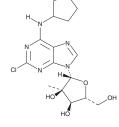
MF: C₁₆H₂₂CIN₅O₄

FW: 383.8 **Purity:**

 λ_{max} : 216, 275 nm A crystalline solid UV/Vis.: Supplied as:

Storage: -20°C Stability: ≥4 years

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



Laboratory Procedures

2'-MeCCPA is supplied as a crystalline solid. A stock solution may be made by dissolving the 2'-MeCCPA in the solvent of choice, which should be purged with an inert gas. 2'-MeCCPA is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 2'-MeCCPA in these solvents is approximately 30 mg/ml.

Description

2'-MeCCPA is an adenosine A_1 receptor agonist. It is selective for adenosine A_1 over A_{2A} and A_3 receptors in radioligand binding assays (Kis = 1.8, 3,900 and 5,000 nM, respectively) and inhibits forskolin-induced activation of adenylyl cyclase in rat cortical membranes (IC₅₀ = 13.1 nM). 2'-MeCCPA (2.5-5 mg/kg) increases tail flick latency in the hot plate test and inhibits formalin-induced late nocifensive behavior in rats.²

References

- 1. Franchetti, P., Cappellacci, L., Marchetti, S., et al. 2'-C-Methyl analogues of selective adenosine receptor agonists: Synthesis and binding studies. J. Med. Chem. 41(10), 1708-1715 (1998).
- 2. Maione, S., de Novellis, V., Cappellacci, L., et al. The antinociceptive effect of 2-chloro-2'-C-methyl-N6-cyclopentyladenosine (2'-Me-CCPA), a highly selective adenosine A1 receptor agonist, in the rat. Pain 131(3), 281-292 (2007).

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

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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