

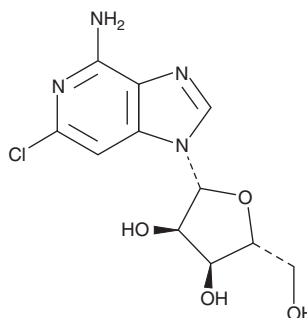
PRODUCT INFORMATION



2-chloro-3-Deazaadenosine

Item No. 9000787

CAS Registry No.: 40656-71-1
Formal Name: 6-chloro-1-β-D-ribofuranosyl-1H-imidazo[4,5-c]pyridin-4-amine
Synonyms: 6-Amino-2-chloropurine riboside, 2-CADO, NSC 158900
MF: C₁₁H₁₃ClN₄O₄
FW: 300.7
Purity: ≥98%
UV/Vis.: λ_{max}: 274 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

2-chloro-3-Deazaadenosine is supplied as a crystalline solid. A stock solution may be made by dissolving the 2-chloro-3-deazaadenosine in the solvent of choice, which should be purged with an inert gas. 2-chloro-3-Deazaadenosine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 2-chloro-3-deazaadenosine in these solvents is approximately 0.25, 2.5, and 2 mg/ml, respectively.

2-chloro-3-Deazaadenosine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 2-chloro-3-deazaadenosine should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. 2-chloro-3-Deazaadenosine has a solubility of approximately 0.1 mg/ml in a 1:10 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Adenosine receptors are a family of G protein-coupled receptors that display distinct patterns of ligand binding and tissue distribution, regulating a variety of physiological functions. 2-chloro-3-Deazaadenosine is a stable analog of adenosine that acts as an agonist for adenosine receptors (K_i = 0.3, 0.08, 25.5, and 1.9 μM for A₁, A_{2A}, A_{2B}, and A₃ receptors, respectively).^{1,2} It can block neurotransmitter release by activating A₁ receptors or inhibit neurotransmission by activating A_{2A} receptors.³⁻⁵ 2-chloro-3-Deazaadenosine blocks seizures by stimulating A₁ receptors.^{6,7}

References

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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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