

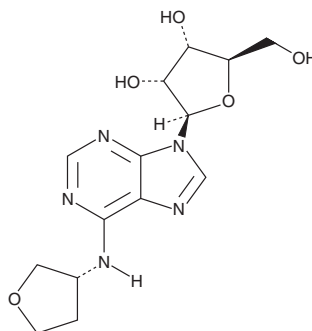
PRODUCT INFORMATION



Tecadenoson

Item No. 28449

CAS Registry No.: 204512-90-3
Formal Name: N-[(3R)-tetrahydro-3-furanyl]-adenosine
Synonym: CVT-510
MF: C₁₄H₁₉N₅O₅
FW: 337.3
Purity: ≥95%
UV/Vis.: λ_{max}: 213, 268 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

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

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 tecadenoson can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of tecadenoson in PBS, pH 7.2, is approximately 3 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Tecadenoson is an adenosine A₁ receptor agonist (K_i = 6.5 nM).¹ It is selective for adenosine A₁ over A₂ receptors (K_i = 2,315 nM). Tecadenoson prolongs stimulus-His bundle potential (SH) intervals in isolated perfused guinea pig hearts (EC₅₀ = 40.6 nM). *In vivo*, tecadenoson induces PR interval prolongation in anesthetized guinea pigs (ED₅₀ = 0.9 µg/kg) and reduces heart rate in anesthetized rats in a dose-dependent manner, without affecting blood pressure.

Reference

1. Cheung, J.W. and Lerman, B.B. CVT-510: A selective A₁ adenosine receptor agonist. *Cardiovasc. Drug Rev.* **21**(4), 277-292 (2003).

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM