

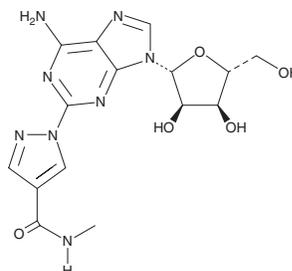
PRODUCT INFORMATION



Regadenoson

Item No. 18814

CAS Registry No.: 313348-27-5
Formal Name: 2-[4-[(methylamino)carbonyl]-1H-pyrazol-1-yl]-adenosine
Synonyms: CVT-3146, Lexiscan
MF: C₁₅H₁₈N₈O₅
FW: 390.4
Purity: ≥98%
UV/Vis.: λ_{max}: 247, 271 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

Regadenoson is supplied as a crystalline solid. A stock solution may be made by dissolving the regadenoson in the solvent of choice, which should be purged with an inert gas. Regadenoson is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of regadenoson in these solvents is approximately 14 and 10 mg/ml, respectively.

Regadenoson is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, regadenoson should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Regadenoson has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Regadenoson is a selective, short-acting adenosine A_{2A} receptor agonist (K_i = 1.1 nM for pig striatum A_{2A} receptor).^{1,2} It increases coronary blood flow 3.4- to 3.8-fold with a half-time to reversal of 1.9-2.6 minutes in open-chest anesthetized pigs.¹ Regadenoson is used to induce hyperemia (increased blood flow), particularly in the context of myocardial perfusion imaging.^{3,4} It has also been found to increase the delivery of compounds to the central nervous system through the blood-brain barrier in animals.^{5,6}

References

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3. Bhatti, S., Hakeem, A., Dhanalakota, S., et al. *Eur. Heart J. Cardiovasc. Imaging* **15**(8), 933-940 (2014).
4. Verberne, H.J., Acampa, W., Anagnostopoulos, C., et al. *Eur. J. Nucl. Med. Mol. Imaging* **42**(12), 1929-1940 (2015).
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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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