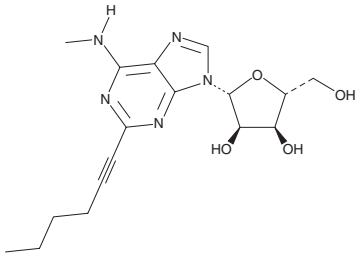
PRODUCT INFORMATION

HEMADO

Item No. 21015

CAS Registry No.:	403842-38-6
Formal Name:	2-(1-hexyn-1-yl)-N-methyl-adenosine
MF:	$C_{17}H_{23}N_5O_4$
FW:	361.4
Purity:	≥98%
UV/Vis.:	λ_{max}: 236, 274, 298 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

HEMADO is supplied as a crystalline solid. A stock solution may be made by dissolving the HEMADO in the solvent of choice. HEMADO is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of HEMADO in these solvents is approximately 20 and 5 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 HEMADO can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of HEMADO in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

HEMADO is a selective agonist of the adenosine A_3 receptor (K_is = 1.1, 327, and 1,230 nM for A_3, A_1, and A_{2A} receptors, respectively).[1] HEMADO reduces release of lactate dehydrogenase (LDH) and creatine kinase-MB (CK-MB) from myocardium in isolated rat hearts subjected to ischemia-reperfusion injury.[2]

References

1. Volpini, R., Costanzi, S., Lambertucci, C., *et al.* N^6-Alkyl-2-alkynyl derivatives of adenosine as potent and selective agonists at the human adenosine A_3 receptor and a starting point for searching A_{2B} ligands. *J. Med. Chem.* **45(15)**, 3271-3279 (2002).
2. Amani, M., Jeddi, S., Ahmadiasl, N., *et al.* Effect of HEMADO on level of CK-MB and LDH enzymes after ischemia/reperfusion injury in isolated rat heart. *Bioimpacts* **3(2)**, 101-104 (2013).

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