

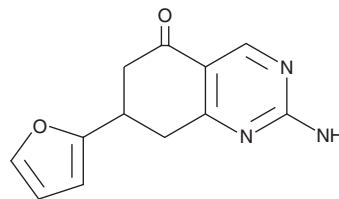
PRODUCT INFORMATION



NKY80

Item No. 17777

CAS Registry No.: 299442-43-6
Formal Name: 2-amino-7-(2-furanyl)-7,9-dihydro-5(6H)-quinazolinone
Synonym: Adenylyl Cyclase Type V Inhibitor
MF: C₁₂H₁₁N₃O₂
FW: 229.2
Purity: ≥98%
UV/Vis.: λ_{max}: 276 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

NKY80 is supplied as a crystalline solid. A stock solution may be made by dissolving the NKY80 in the solvent of choice. NKY80 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of NKY80 in ethanol is approximately 0.25 mg/ml and approximately 10 mg/ml in DMSO and DMF.

NKY80 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, NKY80 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. NKY80 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

NKY80 is a cell-permeable inhibitor of adenylyl cyclase (AC) that is selective for isoform AC5 over AC2 and AC3 (IC₅₀s = 8.3 μM, 1.7 mM, and 132 μM, respectively in the presence of G_sα GTPγS-forskolin).¹ It is a non-competitive inhibitor with respect to ATP (Item No. 14498) and forskolin (Item No. 11018) and tissue selective for AC catalytic activity in heart and lung.¹

Reference

1. Onda, T., Hashimoto, Y., Nagai, M., *et al.* Type-specific regulation of adenylyl cyclase. Selective pharmacological stimulation and inhibition of adenylyl cyclase isoforms. *J. Biol. Chem.* **276**(51), 47785-27793 (2001).

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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