

Product Datasheet

NKY80

Catalog No. **BP-02415** · CAS **299442-43-6** · Form **free base** · Physical state **solid** · Color **Off-white to light yellow** · Version **1.0** · Revision **2026-09-11**

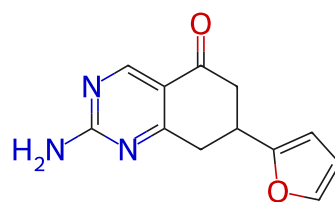
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Target Adenylate Cyclase	Research area Metabolic Disease
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Molecular formula **C₁₂H₁₁N₃O₂**

Molecular weight **229.2346**

STRUCTURE



DESCRIPTION

NKY80 is a potent, selective and non-competitive adenylyl cyclase (AC) type V isoform inhibitor with IC₅₀s of 8.3 μM, 132 μM and 1.7 mM for type V, III and II, respectively. NKY80 is a non-nucleoside quinazolinone and regulates the AC catalytic activity in heart and lung tissues .

BIOLOGICAL ACTIVITY

In Vitro

NKY80 (20 μM) blocks the elevations in both LVP and ventricular cAMP levels produced by the maximal concentration (10 nM).

NKY80 (20 μM; 2 hours) completely blocks the increase in both cAMP content and renin release from isolated JG cells.

SOLUBILITY

Soluble in DMSO : 250 mg/mL

REFERENCES

- [1].Onda T, et al. Type-specific regulation of adenylyl cyclase. Selective pharmacological stimulation and inhibition of adenylyl cyclase isoforms. Biol Chem. 2001 Dec 21;276(51):47785-93.
- [2].Harney JA, et al. Insulin-like stimulation of cardiac fuel metabolism by physiological levels of glucagon: involvement of PI3K but not cAMP. Am J Physiol Endocrinol Metab. 2008 Jul;295(1):E155-61.
- [3].Ortiz-Capisano MC, et al. Adenylyl cyclase isoform v mediates renin release from juxtaglomerular cells. Hypertension. 2007 Mar;49(3):618-24.

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