

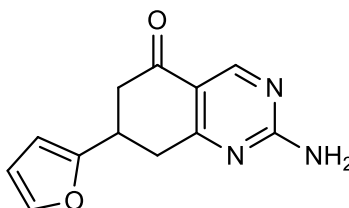
**Catalog # 10-1482**

**NKY80**

299442-43-6

2-Amino-7-(2-furanyl)-7,8-dihydro-5(6H)-quainazolinone

Lot # X106115



Potent and selective adenylyl cyclase inhibitor. Selective for AC5 and over AC3 and AC2 ( $IC_{50} = 8.3 \mu\text{M}$ ,  $132 \mu\text{M}$  and  $1.7 \text{mM}$  respectively)<sup>1,2</sup>. More recently shown to indiscriminantly inhibit AC6<sup>3</sup>. An extremely useful tool for probing the involvement of adenylyl cyclases in cellular signaling<sup>4</sup>.

- 1) Onda *et al.* (2001), *Type[specific regulation of adenylyl cyclase. Selective pharmacological stimulation and inhibition of adenylyl cyclase isoforms]*; J. Biol. Chem., **276** 47785
- 2) Pierre *et al.* (2009), *Capturing adenylyl cyclases as potential drug targets*; Nat. Rev. Drug Discov., **8** 321
- 3) Brand *et al.* (2013), *Isoform selectivity of adenylyl cyclase inhibitor: characterization of known and novel compounds*; J. Pharmacol. Exp. Therap., **347** 265
- 4) Ortiz-Capisano *et al.* (2007), *Adenylyl cyclase isoform v mediates renin release from juxtaglomerular cells*; Hypertension, **49** 618

**PHYSICAL DATA**

Molecular Weight:	229.24
Molecular Formula:	C <sub>12</sub> H <sub>11</sub> N <sub>3</sub> O <sub>2</sub>
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 40 mg/ml) or in Ethanol (up to 5 mg/ml with warming)
Physical Description:	Gold-colored solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.