



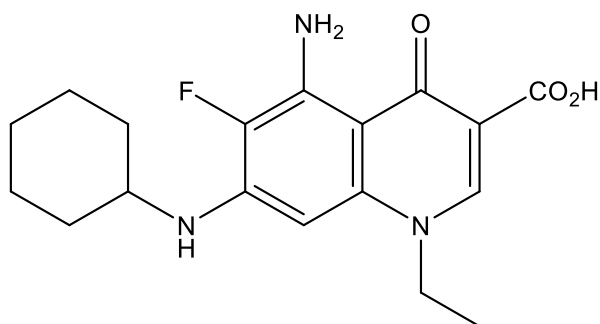
Catalog #10-5344

AS1842856

CAS# 836620-48-5

5-Amino-7-(cyclohexylamino)-1-ethyl-6-fluoro-1,4-dihydro-4-oxo-3-quinolinecarboxylic acid

Lot # E109328



A potent and selective FOXO1 inhibitor, IC_{50} s=33 nM and $>1 \mu\text{M}$ for FOXO3a and 4.¹ Oral administration to diabetic db/db mice leads to a reduction of fasting plasma glucose levels.¹ Suppresses autophagy, FSP27 expression and adipocyte differentiation.² AS1842856 is a highly useful tool for probing the involvement of FOXO1 in cellular processes.³⁻⁵

- 1) Nagashima *et al.* (2010), *Discovery of novel forkhead box O1 inhibitors for treating type 2 diabetes: improvement of fasting glycemia in diabetic db/dbmice*; Mol. Pharmacol. **78** 961
- 2) Liu *et al.* (2016), *FoxO1 antagonist suppresses autophagy and lipid droplet growth in adipocytes*; Cell Cycle **15** 2033
- 3) Galley *et al.* (2019), *Antagonism of Forkhead Box Subclass O Transcription Factors Elicits Loss of Soluble Guanylyl Cyclase Expression*; Mol. Pharmacol. **95** 629
- 4) Chen *et al.* (2024), *SIRT1 silencing ameliorates malignancy of non-small cell lung cancer via activating FOXO1*; Sci. Rep. **14** 19948
- 5) Yang *et al.* (2023), *Suppression of FOXO1 attenuates inflamm-aging and improves liver function during aging*; Aging Cell **22** e13968

PHYSICAL DATA

Molecular Weight:	347.39
Molecular Formula:	C ₁₈ H ₂₂ FN ₃ O ₃
Purity:	>98% (HPLC)
	NMR: (Conforms)
Solubility:	DMSO (10 mg/mL with warming)
Physical Description:	Off-white solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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

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