

Certificate of Analysis

www.tocris.com

Product Name: AS 1842856

Catalog No.: 4265

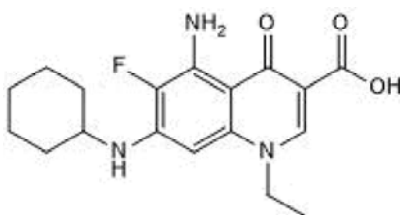
Batch No.: 1

CAS Number: 836620-48-5

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

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₁₈ H ₂₂ FN ₃ O ₃
Batch Molecular Weight:	347.39
Physical Appearance:	White solid
Solubility:	DMSO to 5 mM with gentle warming
Storage:	Store at -20°C
Batch Molecular Structure:	



2. ANALYTICAL DATA

HPLC:	Shows 99.4% purity			
¹H NMR:	Consistent with structure			
Mass Spectrum:	Consistent with structure			
Microanalysis:	Carbon Hydrogen Nitrogen			
	Theoretical	62.23	6.38	12.1
	Found	62.08	6.45	11.98

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
Tel: (800) 343 7475

China
info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa
Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
Tel:+1 612 379 2956

Product Name: AS 1842856

Catalog No.: 4265

Batch No.: 1

CAS Number: 836620-48-5

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

Description:

Potent and selective Foxo1 inhibitor (IC₅₀ values are 33 nM at Foxo1 and >1 μM at Foxo3a and Foxo4); decreases Foxo-mediated promoter activity by 70%, 20% and 3% at Foxo1, Foxo4 and Foxo3, respectively. Regulates gluconeogenesis both in vitro and in vivo. Attenuates fasting plasma glucose level in diabetic db/db mice. Also suppresses autophagy, adipocyte differentiation and soluble guanylyl cyclase expression. Also inhibits STAT3 signaling in NSCLC. Orally bioavailable.

Physical and Chemical Properties:

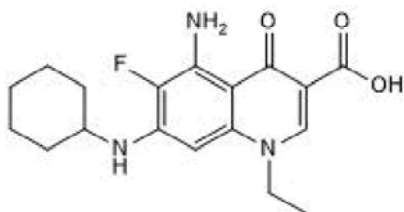
Batch Molecular Formula: C₁₈H₂₂FN₃O₃

Batch Molecular Weight: 347.39

Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 5 mM with gentle warming

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Galley et al (2019) Antagonism of forkhead box subclass O transcription factors elicits loss of soluble guanylyl cyclase expression. *Mol.Pharmacol.* **95** 629. PMID: 30988014.

Liu et al (2016) FoxO1 antagonist suppresses autophagy and lipid droplet growth in adipocytes. *Cell Cycle* **15** 2033. PMID: 27260854.

Nagashima et al (2010) Discovery of novel forkhead box O1 inhibitors for treating type 2 diabetes: improvement of fasting glycemia in diabetic db/db mice. *Mol.Pharmacol.* **78** 961. PMID: 20736318.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel:+1 612 379 2956