

**Product Name:** AS 1842856

**Catalog No.:** 4265

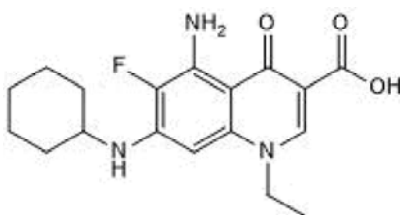
**Batch No.:** 2

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<sub>18</sub>H<sub>22</sub>FN<sub>3</sub>O<sub>3</sub>.  
**Batch Molecular Weight:** 347.39  
**Physical Appearance:** Off-white solid  
**Solubility:** DMSO to 5 mM with gentle warming  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 99.6% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	62.23	6.38	12.1
Found	61.97	6.35	11.93

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

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**Description:**

AS 1842856 is a potent and selective Foxo1 inhibitor (IC<sub>50</sub> 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:**

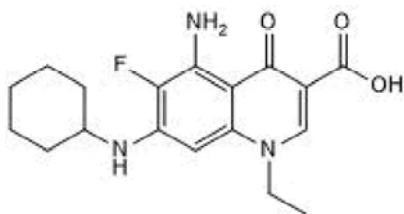
Batch Molecular Formula: C<sub>18</sub>H<sub>22</sub>FN<sub>3</sub>O<sub>3</sub>.

Batch Molecular Weight: 347.39

Physical Appearance: Off-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.

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