

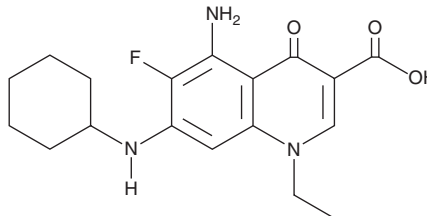
PRODUCT INFORMATION



AS-1842856

Item No. 16761

CAS Registry No.: 836620-48-5
Formal Name: 5-amino-7-(cyclohexylamino)-1-ethyl-6-fluoro-1,4-dihydro-4-oxo-3-quinolinecarboxylic acid
Synonym: FOXO1 Inhibitor
MF: C₁₈H₂₂FN₃O₃
FW: 347.4
Purity: ≥98%
UV/Vis.: λ_{max}: 211, 234, 291 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

AS-1842856 is supplied as a crystalline solid. A stock solution may be made by dissolving the AS-1842856 in the solvent of choice, which should be purged with an inert gas. AS-1842856 is soluble in the organic solvent DMSO at a concentration of approximately 0.5 mg/ml.

Description

AS-1842856 is a potent inhibitor of forkhead box class O transcription factor 1 (FoxO1; IC₅₀ = 33 nM in HepG2 cells).¹ Inhibition of FoxO1-mediated transactivation with AS-1842856 leads to a dose-dependent decrease in expression of glucose-6 phosphatase (G6Pase) and phosphoenolpyruvate carboxykinase (PEPCK) mRNA and inhibits gluconeogenesis in rat hepatoma Fao cells and a murine model of type 2 diabetes mellitus (T2DM). AS-1842856 also inhibits 3T3-L1 preadipocyte differentiation and reduces lipid droplet growth in adipocytes.^{2,3}

References

1. Nagashima, T., Shigematsu, N., Maruki, R., *et al.* Discovery of novel forkhead box O1 inhibitors for treating Type 2 Diabetes: Improvement of fasting glycemia in diabetic db/db mice. *Mol. Pharmacol.* **78**(5), 961-970 (2010).
2. Liu, L., Zheng, L.D., Zou, P., *et al.* FoxO1 antagonist suppresses autophagy and lipid droplet growth in adipocytes. *Cell Cycle* **15**(15), 2033-2041 (2016).
3. Zou, P., Liu, L., Zheng, L., *et al.* Targeting FoxO1 with AS1842856 suppresses adipogenesis. *Cell Cycle* **13**(23), 3759-3767 (2014).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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