

PRODUCT INFORMATION

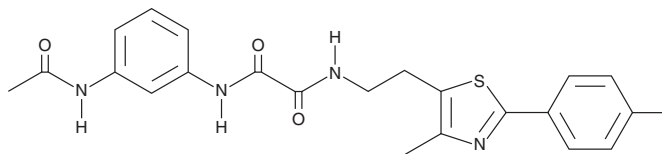


S1QEL1.1

Item No. 20982

CAS Registry No.: 897613-29-5
Formal Name: N¹-(3-acetamidophenyl)-N²-(2-(4-methyl-2-(p-tolyl)thiazol-5-yl)ethyl)oxalamide

Synonym: S1QEL
MF: C₂₃H₂₄N₄O₃S
FW: 436.5
Purity: ≥98%
UV/Vis.: λ_{max}: 240, 299 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

S1QEL1.1 is supplied as a crystalline solid. A stock solution may be made by dissolving the S1QEL1.1 in the solvent of choice, which should be purged with an inert gas. S1QEL1.1 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of S1QEL1.1 in these solvents is approximately 2 and 3 mg/ml, respectively.

S1QEL1.1 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, S1QEL1.1 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. S1QEL1.1 has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

S1QEL1.1 is a small molecule that suppresses superoxide production during reverse electron transport through the I_Q site of the mitochondrial respiratory complex I (IC₅₀ = 70 nM) without affecting oxidative phosphorylation.¹ It diminishes endogenous oxidative damage in primary astrocytes, reduces stress-induced signaling in a cardiomyocyte cell model, and protects against ischemia-reperfusion injury in perfused mouse heart.

Reference

1. Brand, M.D., Goncalves, R.L.S., Orr, A.L., *et al.* Suppressors of superoxide-H₂O₂ production at site I_Q of mitochondrial complex I protect against stem cell hyperplasia and ischemia-reperfusion injury. *Cell Metab.* **24(4)**, 582-592 (2016).

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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