

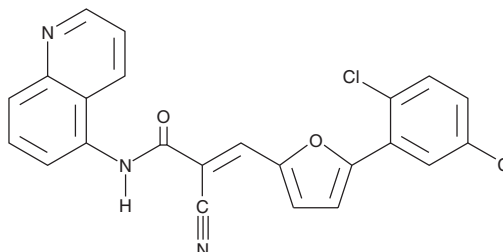
PRODUCT INFORMATION



AGK2

Item No. 13145

CAS Registry No.: 304896-28-4
Formal Name: 2-cyano-3-[5-(2,5-dichlorophenyl)-2-furanyl]-N-5-quinolinyl-2-propenamide
MF: C₂₃H₁₃Cl₂N₃O₂
FW: 434.3
Purity: ≥98%
UV/Vis.: λ_{max}: 222, 383 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

AGK2 is supplied as a crystalline solid. A stock solution may be made by dissolving the AGK2 in the solvent of choice, which should be purged with an inert gas. AGK2 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of AGK2 in these solvents is approximately 1 and 3 mg/ml, respectively.

AGK2 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AGK2 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. AGK2 has a solubility of approximately 0.3 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

Mammalian sirtuin 2 (SIRT2) is a nicotinamide adenine dinucleotide-dependent histone deacetylase (HDAC) with roles in cell cycle progression and tumorigenesis. AGK2 is a cell-permeable, selective inhibitor of SIRT2 (IC₅₀ = 3.5 μM) that minimally affects either SIRT1 or SIRT3 at 10-fold higher levels. It rescues dopamine neurons from α-synuclein toxicity in both *in vitro* and *in vivo* Parkinson's disease models, mimicking the effect of siRNA-mediated blockade of SIRT2 expression.¹ AGK2 may be a useful tool for studying the roles of SIRT2 in neurodegeneration and aging, as well as cell cycle progression and tumorigenesis.

Reference

1. Outeiro, T.F., Kontopoulos, E., Altmann, S.M., *et al.* Sirtuin 2 inhibitors rescue α-synuclein-mediated toxicity in models of Parkinson's Disease. *Science* **317**(5837), 516-519 (2007).

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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