

PRODUCT INFORMATION



DS16570511

Item No. 24160

Formal Name: 3-[3-[[[3-(2,6-dichlorophenyl)-5-methyl-4-isoxazolyl]methyl]amino]benzoyl]-1H-indole-1-butanoic acid

MF: C₃₀H₂₅Cl₂N₃O₄

FW: 562.4

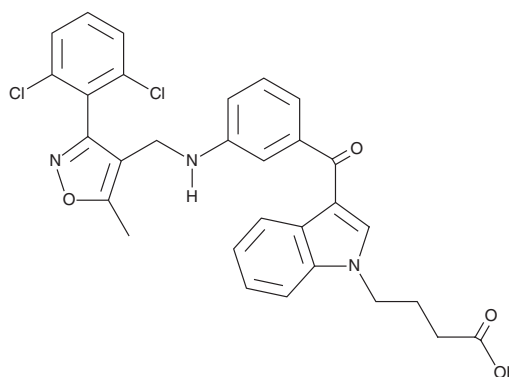
Purity: ≥95%

UV/Vis.: λ_{max}: 245, 317 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

DS16570511 is supplied as a crystalline solid. A stock solution may be made by dissolving the DS16570511 in the solvent of choice. DS16570511 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of DS16570511 in these solvents is approximately 30 mg/ml.

DS16570511 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, DS16570511 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. DS16570511 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

DS16570511 is an inhibitor of the mitochondrial calcium uniporter.¹ It inhibits calcium uptake by mitochondria isolated from HEK293A cells, rat heart, and pig heart (IC₅₀s = 0.86, 25, and 15 μM, respectively). DS16570511 inhibits fetal bovine serum-induced mitochondrial calcium influx as well as MCU- and MICU1-dependent increases in calcium influx in HEK293A cells (IC₅₀ = 7 μM) but has no effect on mitochondrial membrane potential. *Ex vivo*, DS16570511 inhibits mitochondrial calcium overload induced by high calcium concentrations in isolated rat hearts. It also reversibly increases cardiac contractility without affecting heart rate.

Reference

1. Kon, N., Murakoshi, M., Isobe, A., *et al.* DS16570511 is a small-molecule inhibitor of the mitochondrial calcium uniporter. *Cell Death Discov.* **3:17045**, (2017).

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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