

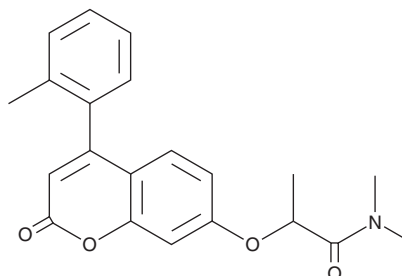
PRODUCT INFORMATION



IMT1

Item No. 43029

CAS Registry No.: 2304621-31-4
Formal Name: N,N-dimethyl-2-[[4-(2-methylphenyl)-2-oxo-2H-1-benzopyran-7-yl]oxy]-propanamide
Synonym: LDC-195943
MF: C₂₁H₂₁NO₄
FW: 351.4
Purity: ≥98%
Supplied as: A 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

IMT1 is supplied as a solid. A stock solution may be made by dissolving the IMT1 in the solvent of choice, which should be purged with an inert gas. IMT1 is soluble (≥10 mg/ml) in DMSO. IMT1 is sparingly soluble (1-10 mg/ml) in ethanol.

Description

IMT1 is an inhibitor of mitochondrial RNA polymerase (POLRMT).¹ It selectively inhibits POLRMT transcription over six other RNA polymerases at 1 μM. IMT1 (0.05-10 μM) decreases mitochondrial mRNA transcripts and mitochondrial DNA levels in HeLa cervical cancer cells. It reduces oxygen flux in HeLa cells when used at concentrations of 0.5, 1, or 5 μM. IMT1 (0.1 μM) decreases the levels of dATP, dCTP, and dTTP and the levels of citric acid cycle intermediates in A2780 ovarian cancer cells. It decreases tumor volume in an A2780 mouse xenograft model when administered at a dose of 100 mg/kg per day.

Reference

1. Bonekamp, N.A., Peter, B., Hillen, H.S., *et al.* Small-molecule inhibitors of human mitochondrial DNA transcription. *Nature* **588(7839)**, 712-716 (2020).

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.

WARRANTY AND LIMITATION OF REMEDY

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