

PRODUCT INFORMATION



Mps1-IN-3

Item No. 41029

CAS Registry No.: 1609584-72-6

Formal Name: 1-[3-methoxy-4-[[[6-[[2-[(1-methylethyl)sulfonyl]phenyl]amino]-9H-purin-2-yl]amino]phenyl]-4-piperidinol

Synonyms: Monopolar Spindle1-IN-3, Monopolar Spindle 1 Inhibitor 3, Mps1 Inhibitor 3

MF: $C_{26}H_{31}N_7O_4S$

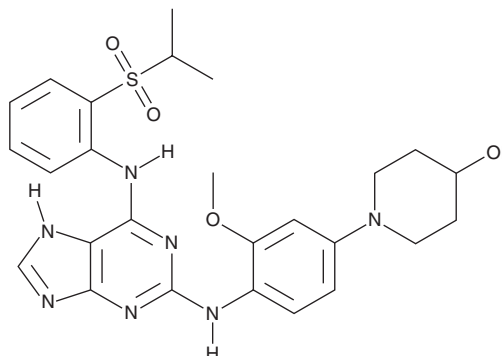
FW: 537.6

Purity: $\geq 98\%$

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

Mps1-IN-3 is supplied as a solid. A stock solution may be made by dissolving the Mps1-IN-3 in the solvent of choice, which should be purged with an inert gas. Mps1-IN-3 is slightly soluble (0.1-1 mg/ml) in DMSO.

Description

Mps1-IN-3 is an inhibitor of monopolar spindle 1 (Mps1; $IC_{50} = 50 \text{ nM}$).¹ It inhibits the proliferation of U251 glioblastoma cells ($IC_{50} = \sim 5 \text{ }\mu\text{M}$). Mps1-IN-3 (2 μM) prevents checkpoint-mediated mitotic arrest induced by nocodazole (Item No. 13857) in U2OS osteosarcoma cells and, when used at a concentration of 5 μM in combination with the antimetabolic agents vincristine (Item No. 11764) or paclitaxel (Item No. 10461), induces nuclear aberrancies and chromosome missegregation defects in U251-FM-H2B-GFP cells, which express firefly luciferase, mCherry, and a histone H2B-GFP fusion reporter. It sensitizes U251-FM cells to vincristine and increases survival in an orthotopic mouse model of glioblastoma when administered at a dose of 2 mg/kg.

Reference

1. Tannous, B.A., Kerami, M., Van der Stoop, P.M., *et al.* Effects of the selective MPS1 inhibitor MPS1-IN-3 on glioblastoma sensitivity to antimetabolic drugs. *J. Natl. Cancer Inst.* **105**(17), 1322-1331 (2013).

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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