# **PRODUCT** INFORMATION



**MI-463** 

Item No. 33525

CAS Registry No.: Formal Name:	1628317-18-9 4-methyl-5-[[4-[[6-(2,2,2-trifluoroethyl) thieno[2,3-d]pyrimidin-4-yl]amino]-1- piperidinyl]methyl]-1H-indole-2-carbonitrile	N S F F
MF:	$C_{24}H_{23}F_3N_6S$	N/
FW:	484.5	
Purity:	≥98%	N H
UV/Vis.:	λ <sub>max</sub> : 226, 230, 279, 287 nm	
Supplied as:	A crystalline solid	
Storage:	-20°C	
Stability:	≥4 years	
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Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

# Laboratory Procedures

MI-463 is supplied as a crystalline solid. A stock solution may be made by dissolving the MI-463 in the solvent of choice, which should be purged with an inert gas. MI-463 is soluble in ethanol and DMSO.

# Description

MI-463 is an inhibitor of the protein-protein interaction between menin and mixed lineage leukemia (MLL) fusion proteins (IC<sub>50</sub> = 15 nM).<sup>1</sup> It inhibits growth of mouse bone marrow cells (BMCs) expressing the MLL fusion protein MLL-AF9 (GI<sub>50</sub> = 0.23  $\mu$ M), as well induces differentiation of MLL-AF9-transformed BMCs.<sup>2</sup> MI-463 (0.75-6 µM) reduces colony formation by patient-derived acute myeloid leukemia (AML) cells. It reduces tumor growth in an MV4-11 mouse xenograft model when administered at a dose of 35 mg/kg.

# References

- 1. Borkin, D., Pollock, J., Kempinska, K., et al. Property focused structure-based optimization of small molecule inhibitors of the protein-protein interaction between menin and mixed lineage leukemia (MLL). J. Med. Chem. 59(3), 892-913 (2016).
- 2. Borkin, D., He, S., Miao, H., et al. Pharmacologic inhibition of the menin-MLL interaction blocks progression of MLL leukemia in vivo. Cancer Cell 27(4), 589-602 (2015).

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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