

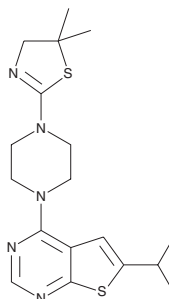
PRODUCT INFORMATION



MI-3

Item No. 27214

CAS Registry No.: 1271738-59-0
Formal Name: 4-[4-(4,5-dihydro-5,5-dimethyl-2-thiazolyl)-1-piperazinyl]-6-(1-methylethyl)-thieno[2,3-d]pyrimidine
MF: C₁₈H₂₅N₅S₂
FW: 375.6
Purity: ≥98%
UV/Vis.: λ_{max}: 224, 288 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

MI-3 is supplied as a crystalline solid. A stock solution may be made by dissolving the MI-3 in the solvent of choice, which should be purged with an inert gas. MI-3 is slightly soluble in ethanol and DMSO.

Description

MI-3 is an inhibitor of the interaction between menin and mixed lineage leukemia (MLL) fusion proteins (IC₅₀ = 648 nM).¹ MI-3 binds to menin (K_d = 201 nM) and inhibits the menin interaction with the MLL fusion protein MLL-AF9 in HEK293 cells without affecting protein levels of menin or MLL-AF9. It inhibits growth of mouse bone marrow cells (BMCs) expressing the *Hoxa9* transformation-dependent MLL fusion proteins MLL-AF9 or MLL-ENL (IC₅₀ = 5 μM for both), as well as reduces colony formation and induces differentiation of MLL-AF9-transformed BMCs. MI-3 inhibits growth of human leukemia cell lines containing MLL translocations and decreases the expression of the transcription factors HOXA9, HOXA10, and MEIS1 in THP-1 cells.

Reference

1. Grembecka, J., He, S., Shi, A., et al. Menin-MLL inhibitors reverse oncogenic activity of MLL fusion proteins in leukemia. *Nat. Chem. Biol.* **8**(3), 277-284 (2012).

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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