

MI-2

Catalog No: tcsc0771



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Size: 200mg



Specifications

CAS No:

1271738-62-5

Formula:

$C_{18}H_{25}N_5S_2$

Pathway:

Epigenetics

Target:

Histone Methyltransferase

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

Alternative Names:

Menin-MLL inhibitor 2

Observed Molecular Weight:

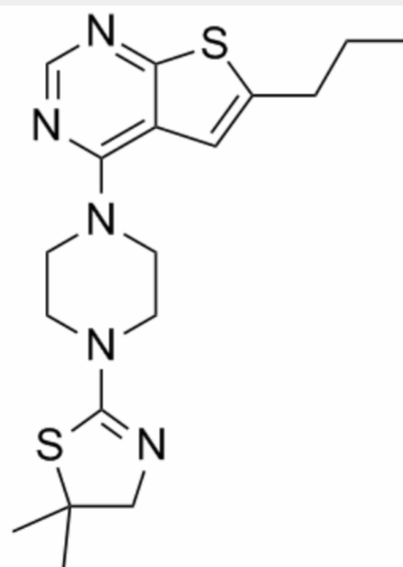
375.55

Product Description

MI-2 is a **Menin-MLL** interaction inhibitor with **IC₅₀** of 446±28 nM.

IC50 & Target: IC50: 446±28 nM (Menin-MLL)^[1]

In Vitro: The menin-MLL inhibitor MI-2 very effectively blocks proliferation of MLL-AF9 and MLL-ENL transduced BMC, with GI₅₀ values of about 5 μM. Assessment of diverse hydrophobic groups at R1 led to the development of several compounds with IC₅₀ values in the nanomolar range, including MI-2 (IC₅₀ = 446±28 nM) and MI-3 (IC₅₀ = 648±25 nM). The dissociation constants measured for the menin-MLL inhibitors are at the nanomolar level, K_d = 158 nM for MI-2. MI-2 can access the protein target and very effectively inhibit the menin-MLL-AF9 interaction in human cells. Furthermore, MI-2 shows only a small effect on the cell growth of E2A-HLF transduced BMC (GI₅₀ > 50 μM), which may be due to inhibition of the menin interaction with wild-type MLL. Treatment with MI-2 results in GI₅₀ values below 10 μM in MV4;11 (harboring MLL-AF4; GI₅₀ = 9.5 μM), KOPN-8 (MLL-ENL; GI₅₀ = 7.2 μM) and ML-2 (MLL-AF6; GI₅₀ = 8.7 μM), and in MonoMac6 (MLL-AF9; GI₅₀ = 18 μM)^[1].



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