Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

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

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Observed Molecular Weight:
375.55

Product Description

MI-2 is a **Menin-MLL** interaction inhibitor with **IC_{50}** 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 GI_{50} values of about 5 μM. Assessment of diverse hydrophobic groups at R1 led to the development of several compounds with IC_{50} values in the nanomolar range, including MI-2 (IC_{50}= 446±28 nM) and MI-3 (IC_{50}=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 (GI_{50}>50 μM), which may be due to inhibition of the menin interaction with wild-type MLL. Treatment with MI-2 results in GI_{50} values below 10 μM in MV4;11 (harboring MLL-AF4; GI_{50}=9.5 μM), KOPN-8 (MLL-ENL; GI_{50}=7.2 μM) and ML-2 (MLL-AF6; GI_{50}=8.7 μM), and in MonoMac6 (MLL-AF9; GI_{50}=18 μM)[1].