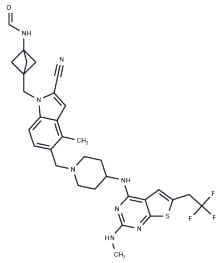
# Data Sheet (Cat.No.T39584)

TargetMol

MI-3454

## Chemical Properties



CAS No. : 2134169-43-8

Formula: C32H35F3N8OS

Molecular Weight: 636.73

Storage: Store at low temperature,Store under nitrogen
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

## Biological Description

| | |
|---|---|
| Description | MI-3454 is an orally active, selective and potent inhibitor of Menin-MLL1 interaction that inhibits the proliferation and induces differentiation of acute leukemia cells with MLL1 translocation or NPM1 mutation.MI-3454 induces complete remission or regression of leukemia in a mouse model of leukemia with MLL1 rearrangement or NPM1 mutation through the down-regulation of key genes involved in leukemogenesis. complete remission or remission. |
| Targets(IC50) | Epigenetic Reader Domain,Histone Methyltransferase |
| In vitro | In murine bone marrow cells transformed with MLL-AF9 or Hoxa9/Meis1, MI-3454 (0.001, 0.01, 0.1, 1, 10 μM; 7 days) demonstrated a significant reduction in cell proliferation[1]. |
| In vivo | In 8- to 10-week-old female NSG mice (MV-4-11 xenotransplantation model of MLL leukemia), MI-3454 (120 mg/kg; orally; once or twice daily for 7 consecutive days) is sufficient to block leukemia progression[1]. |

## Solubility Information

| | |
|---|---|
| Solubility | DMSO: 20 mg/mL (31.41 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 1.5705 mL | 7.8526 mL | 15.7052 mL |
| 5 mM | 0.3141 mL | 1.5705 mL | 3.141 mL |
| 10 mM | 0.1571 mL | 0.7853 mL | 1.5705 mL |
| 50 mM | 0.0314 mL | 0.1571 mL | 0.3141 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Szymon Klossowski, et al. Menin Inhibitor MI-3454 Induces Remission in MLL1 -rearranged and NPM1 -mutated Models of Leukemia. J Clin Invest. 2020 Feb 3;130(2):981-997.
Wu J, Qin C, et al. Epigenetic drug screening for trophoblast syncytialization reveals a novel role for MLL1 in regulating fetoplacental growth. BMC Med. 2024 Feb 5;22(1):57.