Data Sheet (Cat.No.T213001)

PRMT5-IN-53

Chemical Properties

CAS No. :

Formula:

Molecular Weight:

Storage: 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	PRMT5-IN-53 is an orally active, gut-restricted PRMT5 inhibitor, exhibiting pIC50 values of ≥ 9.7 against both hPRMT5 and mPRMT5. It binds to the PRMT5:MEP50 complex with a KD of 11.3 pM. In mice, PRMT5-IN-53 effectively inhibits intestinal PRMT5, significantly reducing both the number and size of polyps while avoiding systemic hematologic toxicity such as anemia and neutropenia. This compound is applicable in colorectal cancer research, particularly for familial adenomatous polyposis (FAP).
Targets(IC50)	Histone Methyltransferase
In vitro	PRMT5-IN-53 (Compound 9) inhibits global SDMA methylation in A549 cells with a pIC_{50} value of 9.4 μM.
In vivo	PRMT5-IN-53 (Compound 9), administered at 25-75 mg/kg twice daily for 7 to 21 consecutive days, demonstrates significant pharmacological effects in the colon and shows efficacy in a DSS-induced Apc Min/+ mouse polyp model.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481