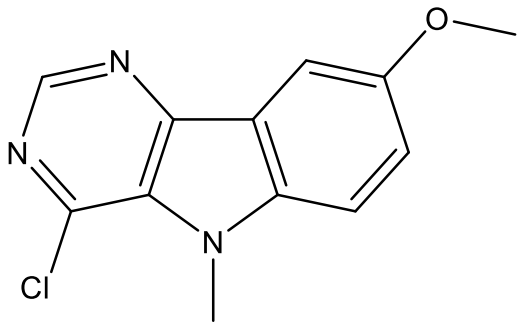
Catalog #10-4872

LD2

CAS# 1134334-55-6

4-Chloro-8-methoxy-5-methyl-5H-pyrimido[5,4-b]indole

Lot # FBS4028



LD2 is a protein arginine N-methyltransferase 9 (PRMT9) inhibitor. It inhibited the viability of leukemia cells (IC_{50} = 2-7 µM in various cell lines). LD2 promoted DNA damage leading to cyclic GMP-AMP synthase (cGAS) activation and a type I IFN response. LD2 acted synergistically with anti-PD-1 mAb in an A20 lymphoma syngeneic model, an MA9 AML transplant model as well as a humanized AML mouse model. LD2 treatment led to leukemia stem cell ablation as well as an anticancer immune response.

1) Dong *et al.* (2024), *Targeting PRMT9-mediated arginine methylation suppresses cancer stem cell maintenance and elicits cGAS-mediated anticancer immunity*; Nat. Cancer **5** 601

PHYSICAL DATA

Molecular Weight:	247.68
Molecular Formula:	$C_{12}H_{10}ClN_3O$
Purity:	>98% (HPLC)
	NMR: (Conforms)
Solubility:	DMSO (at least 40 mg/mL)
Physical Description:	Pale yellow solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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