

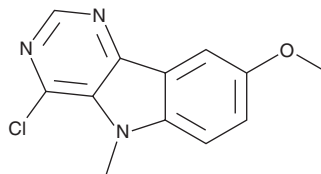
PRODUCT INFORMATION



LD2

Item No. 42447

CAS Registry No.: 1134334-55-6
Formal Name: 4-chloro-8-methoxy-5-methyl-5H-pyrimido[5,4-b]indole
MF: $C_{12}H_{10}ClN_3O$
FW: 247.7
Purity: $\geq 95\%$
Supplied as: A solid
Storage: -20°C
Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

LD2 is supplied as a solid. A stock solution may be made by dissolving the LD2 in the solvent of choice, which should be purged with an inert gas. LD2 is soluble (≥ 10 mg/ml) in acetonitrile. LD2 is sparingly soluble (1-10 mg/ml) in DMSO and slightly soluble (0.1-1 mg/ml) in ethanol.

Description

LD2 is an inhibitor of protein arginine methyltransferase 9 (PRMT9; $IC_{50} = 0.9 \mu\text{M}$).¹ It reduces the proliferation of Rec-1 and Raji lymphoblasts, UPN1 mantle cell lymphoma, BL-41 Burkitt lymphoma, and OCI-Ly3 diffuse large B cell lymphoma (DLBCL) cells ($IC_{50}s = 2.5-5 \mu\text{M}$). LD2 (2.5 μM) induces cell cycle arrest at the G₂/M phase in THP-1 acute myeloid leukemia (AML) cells. It decreases phosphorylated levels of checkpoint kinase 1 (Chk1) and Chk2 in THP-1 cells. *In vivo*, LD2 (10 mg/kg twice per day), in combination with an anti-programmed cell death protein 1 (anti-PD-1) antibody, decreases tumor volume in an AML mouse xenograft model.

Reference

1. Li, L., Dong, H., Zhang, L., et al. Protein arginine methyltransferase 9 inhibitors and methods of use. *Western University of Health Sciences. AS* 2024/0132887 AI, (2024).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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