

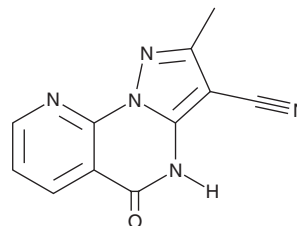
PRODUCT INFORMATION



KDM4D-IN-1

Item No. 37431

CAS Registry No.: 2098902-68-0
Formal Name: 4,5-dihydro-2-methyl-5-oxo-pyrazolo[1,5-a]pyrido[3,2-e]pyrimidine-3-carbonitrile
Synonym: KDM4D Inhibitor 1
MF: C₁₁H₇N₅O
FW: 225.2
Purity: ≥95%
UV/Vis.: λ_{max}: 222, 259 nm
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

KDM4D-IN-1 is supplied as a solid. A stock solution may be made by dissolving the KDM4D-IN-1 in the solvent of choice, which should be purged with an inert gas. KDM4D-IN-1 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of KDM4D-IN-1 in these solvents is approximately 0.2 mg/ml.

Description

KDM4D-IN-1 is an inhibitor of the histone demethylase jumonji domain-containing 2D (JMJD2D; IC₅₀ = 0.41 μM).¹ It is selective for JMJD2D over JMJD1B, JMJD2B, and jumonji AT rich interactive domain-containing protein 1A (JARID1A; IC₅₀s = >10 μM for all). KDM4D-IN-1 (0.5 μM) decreases the colony formation, migration, and invasion of Caki-1 clear cell renal carcinoma cells and 786-O adenocarcinoma cells.² It reduces tumor growth and vessel development in a 786-O mouse xenograft model.

References

1. Fang, Z., Wang, T.-q., Li, H., *et al.* Discovery of pyrazolo[1,5-a]pyrimidine-3-carbonitrile derivatives as a new class of histone lysine demethylase 4D (KDM4D) inhibitors. *Bioorg. Med. Chem. Lett.* **27(14)**, 3201-3204 (2017).
2. Yan, H., Zhu, L., Zhang, J., *et al.* Histone demethylase KDM4D inhibition suppresses renal cancer progression and angiogenesis through JAG1 signaling. *Cell Death Discov.* **7(1)**, 284 (2021).

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.

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