

PRODUCT INFORMATION



JQKD82 (hydrochloride)

Item No. 41542

CAS Registry No.: 2863676-87-1

Formal Name: 2-[[[2-[[2-(dimethylamino)ethyl]ethylamino]-2-oxoethyl]amino]methyl]-4-pyridinecarboxylic acid, 2,4-bis(1-methylethoxy)phenyl ester, trihydrochloride

Synonyms: JADA82, PCK82

MF: $C_{27}H_{40}N_4O_5 \cdot 3HCl$

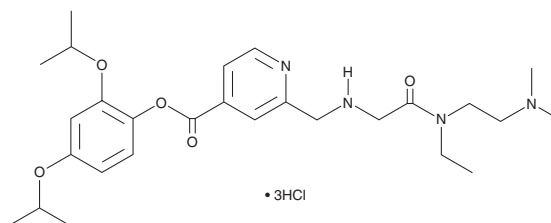
FW: 610.0

Purity: $\geq 98\%$

Supplied as: A solid

Storage: $-20^\circ C$

Stability: ≥ 4 years



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

Laboratory Procedures

JQKD82 (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the JQKD82 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. JQKD82 (hydrochloride) is sparingly soluble (1-10 mg/ml) in DMSO.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of JQKD82 (hydrochloride) can be prepared by directly dissolving the solid in aqueous buffers. JQKD82 (hydrochloride) is soluble (≥ 10 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

JQKD82 is a prodrug form of KDM5-C49, an inhibitor of Jumonji AT-rich interactive domain 1A (JARID1A), also known as lysine-specific demethylase 5A (KDM5A).¹ It increases the levels of trimethylated lysine 4 on histone 3 (H3K4me3) in MOLP-8 and MM.1S multiple myeloma cells when used at concentrations of 0.3 and 1 μM . JQKD82 reduces the proliferation of MOLP-8 and MM.1S cells in a concentration-dependent manner and decreases the viability of primary CD138⁺ cells from patients with multiple myeloma when used at a concentration of 3 μM . It induces cell cycle arrest at the G₀/G₁ phase, as well as induces apoptosis, in MOLP-8 and MM.1S cells when used at a concentration of 1 μM . JQKD82 (50 mg/kg twice per day) decreases tumor growth and increases survival in a MOLP-8 mouse xenograft model.

Reference

- Ohguchi, H., Park, P.M.C., Wang, T., *et al.* Lysine demethylase 5A is required for MYC-driven transcription in multiple myeloma. *Blood Cancer Discov.* **2**(4), 370-387 (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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM