

PRODUCT INFORMATION

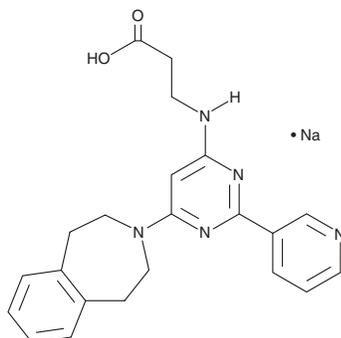


GSK-J2 (sodium salt)

Item No. 12056

CAS Registry No.: 2108665-15-0
Formal Name: 3-((6-(4,5-dihydro-1H-benzo[d]azepin-3(2H)-yl)-2-(pyridin-3-yl)pyrimidin-4-yl)amino)propanoic acid, monosodium salt

MF: C₂₂H₂₃N₅O₂ • Na
FW: 412.4
Purity: ≥90%
UV/Vis.: λ_{max}: 242 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Description

The histone H3 lysine 27 (H3K27) demethylase JMJD3 plays important roles in the transcriptional regulation of cell differentiation, development, the inflammatory response, and cancer.^{1,2} GSK-J2 is a pyridine regio-isomer of GSK-J1 which poorly inhibits JMJD3 (IC₅₀ > 100 μM), making it an appropriate negative control for *in vitro* studies involving GSK-J1.³ For *in vivo* research, cell-permeable prodrug forms of GSK-J1 and GSK-J2 are available as GSK-J4 (Item No. 12073) and GSK-J5 (Item No. 12074), respectively. See the Structural Genomics Consortium (SGC) website for more information.

References

1. Agger, K., Cloos, P.A.C., Christensen, J., *et al.* UTX and JMJD3 are histone H3K27 demethylases involved in HOX gene regulation and development. *Nature* **449(7163)**, 731-4 (2011).
2. Hübner, M.R. and Spector, D.L. Role of H3K27 demethylases Jmjd3 and UTX in transcriptional regulation. *Cold Spring Harb. Symp. Quant. Biol.* **75**, 43-49 (2010).
3. Kruidenier, L., Chung, C.W., Cheng, Z., *et al.* A selective jumonji H3K27 demethylase inhibitor modulates the proinflammatory macrophage response. *Nature* **488(7411)**, 404-408 (2012).

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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