## PRODUCT INFORMATION



**LLY-283** 

Item No. 21596

CAS Registry No.: 2040291-27-6

Formal Name: (7-[(5R)-5-C-phenyl-β-D-ribofuranosyl]-

7H-pyrrolo[2,3-d]pyrimidin-4-amine

MF:  $C_{17}H_{18}N_4O_4$ 

FW: 342.4 **Purity:** ≥98%

 $\lambda_{max}$ : 230, 274 nm A crystalline solid UV/Vis.: Supplied as:

-20°C Storage: Stability: ≥4 years

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

## **Laboratory Procedures**

LLY-283 is supplied as a crystalline solid. A stock solution may be made by dissolving the LLY-283 in the solvent of choice. LLY-283 is soluble in organic solvents such as ethanol and DMSO, which should be purged with an inert gas. The solubility of LLY-283 in these solvents is approximately 60 mg/ml.

## Description

LLY-283 is an inhibitor of protein arginine methyltransferase 5 (PRMT5;  $IC_{50} = 22$  nM).<sup>1</sup> It is selective for PRMT5 over a panel of methyltransferases, including PRMT4, -6, and -7 at 1  $\mu$ M. It reduces symmetric demethylation of SmBB' in MCF-7 cells (IC $_{50}$  = 25 nM) and inhibits proliferation of various breast, gastric, hematological, lung, skin, and ovarian cancer cell lines (IC<sub>50</sub>s = 3-30 nM). LLY-283 (20 mg/kg) inhibits tumor growth in an A375 mouse xenograft model. It also disrupts alternative splicing events in, and inhibits proliferation and self-renewal of, patient-derived glioblastoma stem cells and increases survival in an orthotopic patient-derived xenograft (PDX) mouse model.<sup>2</sup> See the Structural Genomics Consortium (SGC) website for more information.

## References

- 1. Bonday, Z.Q., Cortez, G.S., Grogan, M.J., et al. LLY-283, a potent and selective inhibitor of arginine methyltransferase 5, PRMT5, with antitumor activity. ACS Med. Chem. Lett. 9(7), 612-617 (2018).
- Sachamitr, P., Ho, J.C., Ciamponi, F.E., et al. PRMT5 inhibition disrupts splicing and stemness in glioblastoma. Nat Commun. 12(1), 979 (2021).

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

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