

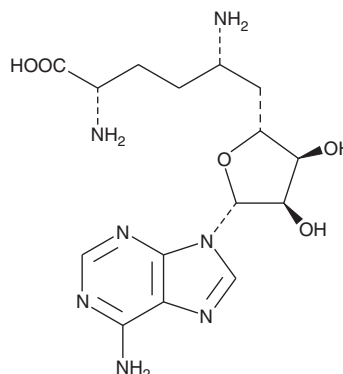
PRODUCT INFORMATION



Sinefungin

Item No. 13829

CAS Registry No.: 58944-73-3
Formal Name: 6,9-diamino-1-(6-amino-9H-purin-9-yl)-1,5,6,7,8,9-hexadeoxy-D-glycero- α -L-talo-decofuranuronic acid
Synonyms: A 9145, Antibiotic A 9145, Antibiotic 32232RP, RP 32232
MF: C₁₅H₂₃N₇O₅
FW: 381.4
Purity: $\geq 95\%$
UV/Vis.: λ_{max} : 260 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥ 4 years
Item Origin: Bacterium/*Streptomyces* sp.



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

Laboratory Procedures

Sinefungin is supplied as a solid. A stock solution may be made by dissolving the sinefungin in water. The solubility of sinefungin in water is approximately 20 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Sinefungin is a nucleoside structurally related to S-adenosylhomocysteine (Item No. 13603) and S-adenosylmethionine (Item No. 13956) that was originally isolated from *Streptomyces*.¹⁻² While it has limited use as an antibiotic due to its high *in vivo* toxicity, sinefungin has proved useful as a non-selective inhibitor of SET domain-containing methyltransferases in the study of epigenetic regulation (IC₅₀ values range from 0.1-20 μ M).³⁻⁷

References

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4. Bissinger, E.-M., Heinke, R., Sippl, W., et al. Targeting epigenetic modifiers: Inhibitors of histone methyltransferases. *Med. Chem. Commun.* (2010).
5. Horiuchi, K.Y., Eason, M.M., Ferry, J.J., et al. Assay development for histone methyltransferases. *Assay Drug Dev. Technol.* **11**(4), 227-236 (2013).
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7. Schluckebier, G., Kozak, M., Bleimling, N., et al. Differential binding of S-adenosylmethionine S-adenosylhomocysteine and sinefungin to the adenine-specific DNA methyltransferase M. *Taq. J. Mol. Biol.* **265**, 56-67 (1997).

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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