

PRODUCT DATA SHEET

Code No.: BIA-S1376

Pack sizes: 0.5 mg, 2.5 mg

Synonyms : A 9145, RP 32232

Specifications

Sinefungin

CAS # : 58944-73-3 Molecular Formula : $C_{15}H_{23}N_7O_5$

Molecular Weight : 381.4

Source : Streptomyces sp.

Appearance : White solid
Purity : >95% by HPLC

Long Term Storage : -20°C

Solubility: Soluble in ethanol, methanol, DMF or DMSO. Good water solubility.

Application Notes

Sinefungin, a polar nucleoside antifungal active with broad biological activity, was isolated from a number of species of Streptomyces in the early 1970s. Sinefungin acts by inhibiting a wide range of methyltransferases, including the methylation of bases in DNA and RNA which alters cytosine deamination and gene expression. Sinefungin is widely used as a bioprobe to block methyltransferase-dependent pathways.

References

- 1. A9145, a new adenine-containing antifungal antibiotic. I. Discovery and isolation. Hamil R.L. & Hoehn M.M. J. Antibiot. 1973, 26, 463.
- 2. Sinefungin, a potent inhibitor of S-adenosylmethionine protein O-methyltransferase. Borchardt R.T. et al. Biochem. Biophys. Res. Commun. 1979, 89, 919.

Updated: 2 December 2014