

PRODUCT DATA SHEET

Kazusamycin B

Code: **BIA-K1043**

Pack sizes: 0.1 mg, 0.5 mg

$$OO_2H$$

Synonyms : Hydroxyleptomycin A, Antibiotic CL 1957E, Antibiotic PD 124895

Specifications

CAS # : 107140-30-7

Molecular Formula : $C_{32}H_{46}O_7$ Molecular Weight : 542.7

Source : Streptomyces sp. MST-AS4898

Appearance : Colourless Film
Purity : > 95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol or methanol. Ethanol recommended. Unstable in DMSO.

Application Notes

Kazusamycin B is a minor component of the leptomycin complex produced by some *Streptomyces* sp. It is an hydroxylated analogue of Leptomycin A, a nuclear export inhibitor. Kazusamycin B displays potent antitumour activity against L1210 and human colon adenocarcinoma and *in vivo* activity against P388 lymphocytic leukemia in mice. Kazusamycin B also possesses strong antibacterial and antifungal activity.

References

- 1. Leptomycin B is an inhibitor of nuclear export: inhibition of nucleo-cytoplasmic translocation of the human immunodeficiency virus type 1 (HIV-1) Rev protein and Rev-dependent mRNA. Wolff B. et al. *Chem. Biol.* **1997**, 4, 139.
- 2. The effect of kazusamycin B on the cell cycle and morphology of cultured L1210 cells. Takamiya K. et al. *J. Antibiot.* **1988**, 41, 1854.
- 3. PD 124,895 and PD 124,966, two new antitumor antibiotics. Hurley T.R. et al. *J. Antibiot.* **1986**, 39, 1651.