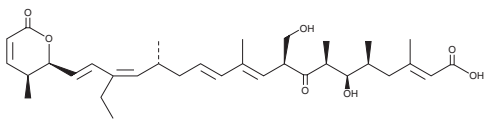
PRODUCT INFORMATION

Kazusamycin A

Item No. 20137

CAS Registry No.: 92090-94-3
Formal Name: (2E,5S,6R,7S,9S,10E,12E,15R,16Z,18E)-19-[(2S,3S)-3,6-dihydro-3-methyl-6-oxo-2H-pyran-2-yl]-17-ethyl-6-hydroxy-9-(hydroxymethyl)-3,5,7,11,15-pentamethyl-8-oxo-2,10,12,16,18-nonadecapentaenoic acid
Synonyms: CL 1,957B, Hydroxyelactocin, Hydroxyleptomycin B, PD 114721
MF: $C_{33}H_{48}O_7$
FW: 556.7
Purity: ≥95%
Supplied as: A film
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Kazusamycin A is supplied as a film. A stock solution may be made by dissolving the kazusamycin A in the solvent of choice, which should be purged with an inert gas. Kazusamycin A is soluble in organic solvents such as ethanol and methanol.

Kazusamycin A is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Kazusamycin A is an antibiotic from *Streptomyces* and a hydroxy analog of leptomycin B (Item No. 10004976) that demonstrates cytotoxic activity against various human and mouse tumor lines.[1] Additionally, at nanomolar concentrations, it inhibits nuclear export and translocation of REV, a regulatory gene product in the HIV genome.[2,3]

References

1. Tunac, J. B., Graham, B. D., Dobson, W. E., *et al.* Novel antitumor antibiotics, CI-940 (PD 114,720) and PD 114,721. Taxonomy, fermentation and biological activity. *J. Antibiot. (Tokyo)* **38(4)**, 460-465 (1985).
2. Wang, Y., Ponelle, M., Sanglier, J.-J., *et al.* Novel leptomycins from a *Streptomyces* strain A92-308902: Inhibitors of the nucleo-cytoplasmic translocation of the HIV-1 regulatory protein Rev. *Helv. Chim. Acta.* **80(7)**, 2157-2167 (1997).
3. Wolff, B., Sanglier, J.-J., Wang, Y., 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. *Chem. Biol.* **4(2)**, 139-147 (1997).

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