

Product Data Sheet

Product Name: Kigamicin C

Cat. No.: GC44003

Chemical Properties

Cas. No. 680571-51-1

SMILES O=C1C2=C([C@@H](O)[C@H](O[C@]3([H])O[C@H](C)[C@@H](O[C@@]4([H])C[C@@H](OC)[C@H](O)[C@@H](C)O4)CC3)C[C@@H]2O)OC(C1=C5O)=C6OCO[C@@]7([H])C6=C5C(C(O)=C(C(N(CCO8)[C@@]8(C)C9)=O)C9=C%10)=C%10C7

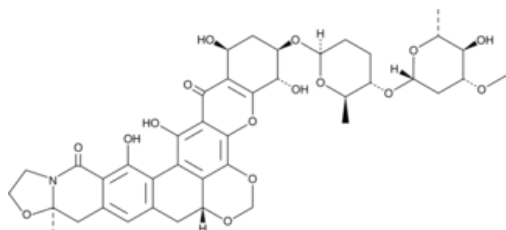
Formula C₄₁H₄₇NO₁₆ M.Wt 809.8

Solubility DMF: soluble, DMSO: soluble, Ethanol: soluble, Methanol: soluble
Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

Kigamicins are natural antitumor antibiotics that selectively kill pancreatic cancer PANC-1 cells only under nutrient-starved conditions. They also show antimicrobial activity against Gram-positive bacteria, including methicillin-resistant *S. aureus*. Kigamicin C inhibits PANC-1 cell survival in nutrient-deprived media at a 100-fold lower concentration than that required for cells maintained in nutrient-rich media. A related compound, kigamicin D, is active in vivo, suppressing the tumor growth of several pancreatic cancer cell lines in nude mice. It blocks the activation of Akt induced in PANC-1 cells placed in nutrient-deprived media. Kigamicin can also induce necrosis in human myeloma cells, but not normal lymphocytes, maintained in nutrient-rich media (CC₅₀ = 100 nM).

Caution: Product has not been fully validated for medical applications. For research use only.

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Address: 10292 Central Ave. #205, Montclair, CA, USA

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