
Product Data Sheet

Product Name: 5-Iminodaunorubicin

Cat. No.: GC62389

Chemical Properties

Cas. No. 72983-78-9

Formula $C_{27}H_{30}N_2O_9$ M.Wt 526.54

Solubility 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**

5-Iminodaunorubicin is a quinone-modified anthracycline that retains antitumor activity[1]. 5-Iminodaunorubicin produces protein-concealed DNA strand breaks in cancer cells[2].

In mouse leukemia L1210 cells, 5-Iminodaunorubicin produces protein-concealed DNA strand breaks. Many of the 5-iminodaunorubicin breaks may arise from apposed single-strand breaks (i.e., double-strand breaks)[2].

In rat, 5-Iminodaunorubicin (5-ID; 1-16 mg/kg) treatment produces widening of the QRS complex, increased R- and S-wave voltage, and prolonged the Q alpha T interval. And the quinone redox cycling is suppressed in 5-Iminodaunorubicin. 5-Iminodaunorubicin shows lower cardiotoxic[1].

[1]. R A Jensen, et al. Electrocardiographic and transmembrane potential effects of 5-iminodaunorubicin in the rat. Cancer Res. 1984 Sep;44(9):4030-9.

[2]. L A Zwelling, et al. Cytotoxicity and DNA strand breaks by 5-iminodaunorubicin in mouse leukemia L1210 cells: comparison with adriamycin and 4'-(9-acridinylamino)methanesulfon-m-anisidide. Cancer Res. 1982 Jul;42(7):2687-91.

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

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