
Product Data Sheet

Product Name: Clitocine
Cat. No.: GC60111

Chemical Properties

Cas. No. 105798-74-1

SMILES O[C@H]1[C@H](NC2=NC=NC(N)=C2[N+])([O-])=O)[C@H](CO)[C@H]1O

Formula $C_9H_{13}N_5O_6$ M.Wt 287.23

Solubility Storage

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

Clitocine, an adenosine nucleoside analog, is a potent and efficacious readthrough agent. Clitocine can induce the production of p53 protein in cells harboring p53 nonsense-mutated alleles. Clitocine can induce apoptosis in multidrug-resistant human cancer cells by targeting Mcl-1. Anticancer activity[1][2].

Clitocine (0-0.8μM; 24 hours) enhances TRAIL-lethality in LS411N and SW620 cells. Clitocine (0.2μM; 36 hours) significantly potentiates TRAIL-mediated apoptosis[2].

Citocine (0.3-3 mg/kg; s.c.; five times per week)-induced p53 inhibits CAOv-33p53-UAA136 tumor growth in a xenograft model[1]. Animal Model: nu/nu mice (CAOV-3p53-UAA136 xenograft tumors)[1]

[1]. Friesen WJ, et al. The nucleoside analog clitocine is a potent and efficacious readthrough agent. RNA. 2017;23(4):567-577. [2]. Sun JG, et al. Clitocine potentiates TRAIL-mediated apoptosis in human colon cancer cells by promoting Mcl-1 degradation. Apoptosis. 2016;21(10):1144-1157.

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

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