Data Sheet (Cat.No.T7551)

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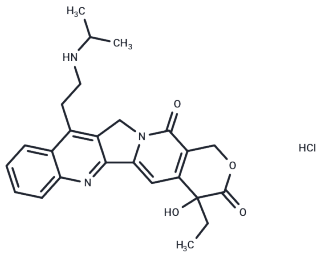
Belotecan hydrochloride

Chemical Properties



CAS No. : 213819-48-8

Formula: C25H28ClN3O4

Molecular Weight: 469.96

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Belotecan hydrochloride (CKD-602) is a synthetic water-soluble camptothecin derivative and topoisomerase I inhibitor with potential antitumor activity
Targets(IC50)	Topoisomerase
In vitro	Belotecan hydrochloride(CKD-602) was revealed to exert a significant cytotoxic effect on all cell lines in a time- and dose-dependent manner.?The cell viability IC50 values were 2.4 μg/ml for YD-8, 0.18 μg/ml for YD-9 and 0.05 μg/ml for YD-38 cells at 72 h following treatment[1].
Cell Research	Cells at a density of 2×10^4 cells/well in 100 μl RPMI with 10% FBS were added to the wells of a 96-well plate.?The cells were treated with different concentrations (0.01, 0.1, 0.5, 1, 5 and 10 μg/ml) of CKD-602 for 24, 48 and 72 h. Control samples of each cell line were treated with medium only.?For the viability assay, 20 μl/well CellTiter 96AQueous One Solution Reagent (MTS) was added.?After 1 h incubation at 37°C in a humidified atmosphere of 5% CO2, the absorbance at 490 nm was recorded using an ELISA plate reader ?The assay was performed in triplicate with three independent experiments for each condition.?The data from the treatment groups were normalized to those of the control samples and are presented as the mean ±standard error of the mean.?The half maximal (50%) inhibitory concentration (IC50) values were calculated from the dose-response curve[1].

Solubility Information

Solubility	DMSO: 50 mg/mL (106.39 mM), (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1278 mL	10.6392 mL	21.2784 mL
5 mM	0.4256 mL	2.1278 mL	4.2557 mL
10 mM	0.2128 mL	1.0639 mL	2.1278 mL
50 mM	0.0426 mL	0.2128 mL	0.4256 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Kim Y K , Koo N Y , Yun P Y . Anticancer effects of CKD-602 (Camtobell (R)) via G2/M phase arrest in oral squamous cell carcinoma cell lines[J]. Oncology letters, 2015, 9(1):136-142.