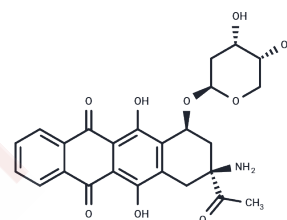


Amrubicin hydrochloride

Chemical Properties

CAS No. :	110311-30-3
Formula:	C ₂₅ H ₂₆ ClNO ₉
Molecular Weight:	519.93
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



HCl

Biological Description

Description	Amrubicin (SM-5887) hydrochloride is a DNA topoisomerase II inhibitor that can be utilized in cancer research.
Targets(IC50)	Antibacterial, Topoisomerase
In vitro	Amrubicin (SM-5887) at a concentration of 2.5 µg/mL demonstrates radio-enhancement effects on human lung adenocarcinoma A549 cells. It inhibits the proliferation of LX-1, A549, A431, and BT-474 cell lines, producing IC50 values of 1.1 ± 0.2, 2.4 ± 0.8, 0.61 ± 0.10, and 3.0 ± 0.3 µg/mL, respectively. Furthermore, Amrubicin (SM-5887) disrupts the cell cycle of U937 cells with an IC50 of 5.6 µM, induces apoptosis, activates caspase-3/7, and decreases the mitochondrial membrane potential (Δψ _m) at 20 µM.
In vivo	Administered intravenously at 25 mg/kg, Amrubicin (SM-5887) demonstrates notable antitumor efficacy against SCLC tumors, Lu-24 and Lu-134, achieving T/C values of 17% and 9%, respectively, on day 14. Additionally, Amrubicin combined with cisplatin and irinotecan further inhibits tumor progression compared to the drug alone in mice with LX-1 tumors. Furthermore, Amrubicin (SM-5887), either by itself or in conjunction with tegafur and uracil, effectively reduces tumor growth in human cancer xenograft models.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9233 mL	9.6167 mL	19.2334 mL
5 mM	0.3847 mL	1.9233 mL	3.8467 mL
10 mM	0.1923 mL	0.9617 mL	1.9233 mL
50 mM	0.0385 mL	0.1923 mL	0.3847 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481