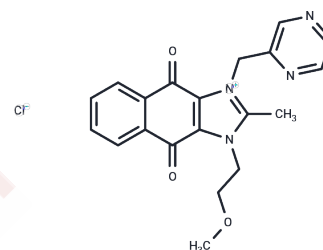


YM-155 hydrochloride

Chemical Properties

CAS No. :	355406-09-6
Formula:	C ₂₀ H ₁₉ ClN ₄ O ₃
Molecular Weight:	398.85
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Sepantronium hydrochloride (YM-155 hydrochloride) is a novel survivin suppressant that inhibits the survivin promoter with an IC ₅₀ of 0.54 nM[1].
Targets(IC50)	Others, Autophagy, Survivin
In vitro	Sepantronium bromide (YM155; 30 μM) does not affect survivin gene promoter-driven luciferase reporter activity but significantly suppresses endogenous survivin expression in PC-3 and PPC-1 human HPC cells with deficient p53 by transcriptionally inhibiting the survivin gene promoter. At 100 nM, it does not impact the protein expression of c-IAP2, XIAP, Bcl-2, Bcl-xL, Bad, α-actin, and β-tubulin. Sepantronium bromide exhibits potent inhibition against various human cancer cell lines, including those with mutated or truncated p53 (e.g., PC-3, PPC-1, DU145, TSU-Pr1, 22Rv1, SK-MEL-5, and A375), with IC ₅₀ values ranging from 2.3 to 11 nM. It also increases the sensitivity of NSCLC cells to γ-radiation, enhances apoptotic cell numbers and caspase-3 activity, and delays the repair of radiation-induced double-strand breaks in nuclear DNA.
In vivo	Sepantronium bromide (YM155) effectively inhibits tumor growth in PC-3 xenografts at doses of 3 and 10 mg/kg without causing significant loss in body weight or reduction in blood cell count. It preferentially accumulates in tumor tissues in vivo and achieves an 80% Tumor Growth Inhibition (TGI) at a 5 mg/kg dosage in PC-3 orthotopic xenografts [1]. Additionally, when combined with γ-radiation, YM155 exhibits potent antitumor efficacy against H460 and Calu6 xenografts in nude mice [2]. In models of orthotopic renal and metastatic lung tumors, the combination of YM-155 (Sepantronium bromide) and IL-2 synergistically reduces tumor weight, lung metastases, and the visibility of luciferin-stained tumors [3].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5072 mL	12.536 mL	25.0721 mL
5 mM	0.5014 mL	2.5072 mL	5.0144 mL
10 mM	0.2507 mL	1.2536 mL	2.5072 mL
50 mM	0.0501 mL	0.2507 mL	0.5014 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

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