



YM-155

Catalog No: tcsc0336

Available Sizes
Size: 5mg
Size: 10mg
Size: 50mg
Size: 100mg
Specifications
CAS No: 781661-94-7
Formula: C ₂₀ H ₁₉ BrN ₄ O ₃
Pathway: Apoptosis;Autophagy
Target: Survivin;Autophagy
Purity / Grade: >98%
Solubility: DMSO: 10.66 mg/mL (24.05 mM; Need ultrasonic and warming)
Alternative Names: Sepantronium bromide
Observed Molecular Weight: 443.29





Product Description

YM-155 is a novel **survivin** suppressant with an IC_{50} of 0.54 nM for the inhibition of survivin promoter activity.

IC50 & Target: IC50: 0.54 nM (survivin)

In Vitro: YM155 (30 μ M) is not sensitive to survivn gene promoter-driven luciferase reporter activity. YM155 shows significant supression on endogenous survivin expression in PC-3 and PPC-1 human HRPC cells with deficient p53 via transcriptional inhibition of the survivin gene promoter. YM155 (100 nM) does not affect protein expression of c-IAP2, XIAP, BcI-2, BcI-xL, Bad, α -actin, and β -tubulin. YM155 potently inhibits human cancer cell lines (mutated or truncated p53) such as PC-3, PPC-1, DU145, TSU-Pr1, 22Rv1, SK-MEL-5 and A375 with IC $_{50}$ s ranging from 2.3 to 11 nM, respectively^[1]. YM155 resultin in an increase in sensitivity of NSCLC cells to γ -radiation. YM155 combined with γ -radiation increases both the number of apoptotic cells and the activity of caspase-3. In addition, YM155 delays the repair of radiation-induced double-strand breaks in nuclear DNA^[2].

In Vivo: YM155 (3 and 10 mg/kg) inhibits the tumor growth in PC-3 xenografts, without obvious body weight loss and blood cell count decrease. YM155 is highly distributed to tumor tissue in vivo. YM155 shows 80% TGI at a dose of 5 mg/kg in PC-3 orthotopic xenografts^[1]. YM155 in combination with γ -radiation shows potent antitumor activity against H460 or Calu6 xenografts in nude mice ^[2]. In this orthotopic renal and metastatic lung tumors models, YM155 and IL-2 additively decreases tumor weight, lung metastasis, and luciferin-stained tumor images^[3].

All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!