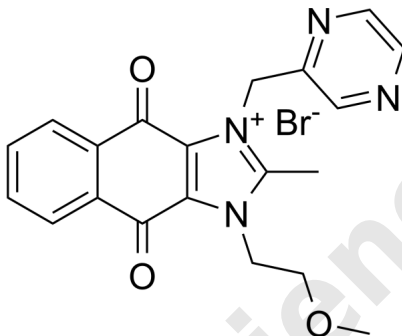


## Data Sheet

### Product Information

Catalog Number	BP22555
Product Name	Sepantronium bromide
Description	Sepantronium bromide (YM-155) is a survivin inhibitor with an IC <sub>50</sub> of 0.54 nM.
In vitro	<p>Sepantronium bromide (YM155; 30 <math>\mu</math>M) is not sensitive to survivin gene promoter-driven luciferase reporter activity. Sepantronium bromide shows significant suppression on endogenous survivin expression in PC-3 and PPC-1 human HRPC cells with deficient p53 via transcriptional inhibition of the survivin gene promoter. Sepantronium bromide (100 nM) does not affect protein expression of c-IAP2, XIAP, Bcl-2, Bcl-xL, Bad, <math>\alpha</math>-actin, and <math>\beta</math>-tubulin. Sepantronium bromide 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<sub>50</sub>s ranging from 2.3 to 11 nM, respectively. Sepantronium bromide (YM155) results in an increase in sensitivity of NSCLC cells to <math>\gamma</math>-radiation. Sepantronium bromide combined with <math>\gamma</math>-radiation increases both the number of apoptotic cells and the activity of caspase-3. In addition, Sepantronium bromide delays the repair of radiation-induced double-strand breaks in nuclear DNA.</p>
In vivo	<p>Sepantronium bromide (YM155; 3 and 10 mg/kg) inhibits the tumor growth in PC-3 xenografts, without obvious body weight loss and blood cell count decrease. Sepantronium bromide is highly distributed to tumor tissue in vivo. Sepantronium bromide shows 80% TGI at a dose of 5 mg/kg in PC-3 orthotopic xenografts. Sepantronium bromide (YM155) in combination with <math>\gamma</math>-radiation shows potent antitumor activity against H460 or Calu6 xenografts in nude mice. In this orthotopic renal and metastatic lung tumors models, Sepantronium bromide (YM-155) and IL-2 additively decreases tumor weight, lung metastasis, and luciferin-stained tumor images.</p>
CAS No.	781661-94-7

Chemical Formula	C <sub>20</sub> H <sub>19</sub> BrN <sub>4</sub> O <sub>3</sub>
Molecular Weight	443.29
Solubility	DMSO: 50 mg/mL (112.79 mM, Need ultrasonic) H <sub>2</sub> O: 50 mg/mL (112.79 mM, Need ultrasonic)
Storage	Powder: -20°C for 2 years In solvent: -80°C for 1 year
Chemical Structure OR Tested Image	

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