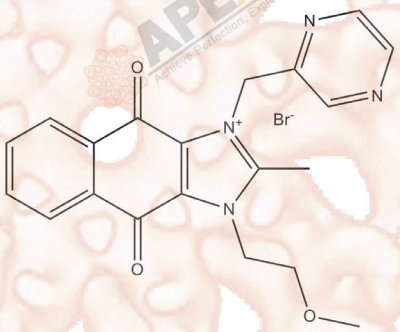
Product Data Sheet

YM155

Cat. No.:	A4221
CAS No.:	781661-94-7
Formula:	C20H19BrN4O3
M.Wt:	443.3
Synonyms:	Sepantronium bromide,YM-155
Target:	Apoptosis
Pathway:	IAP
Storage:	Store at -20°C



Solvent & Solubility

In Vitro

⩾22.15 mg/mL in DMSO, ⩾13.49 mg/mL in EtOH with ultrasonic, ⩾96.2 mg/mL in H2O with ultrasonic

Preparing Stock Solutions

Concentration \ Mass / Solvent	1mg	5mg	10mg
1 mM	2.2558 mL	11.2790 mL	22.5581 mL
5 mM	0.4512 mL	2.2558 mL	4.5116 mL
10 mM	0.2256 mL	1.1279 mL	2.2558 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary	Survivin suppressant,apoptosis inhibitor
IC_{50} & Target	0.54 nM (Survivin)

In Vitro

Cell Viability Assay

Cell Line:	PC-3 and PPC-1 cells
Preparation method：	The solubility of this compound in DMSO is >10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.
Reacting conditions:	1 μM, 48 hours
Applications:	In both cell lines, YM155, at concentrations from 10 to 1000 nM, significantly

		decreased the viability of cells in a dose-dependent manner. When exposed to YM155, PC-3 and PPC-1 showed a concomitant increase in caspase-3 activity. These results suggest that YM155 induces apoptosis in human HRPC cells.
In Vivo	**Animal experiment**	
	Animal models:	BALB/c nu/nu mice injected with PC-3 cells
	Dosage form:	Subcutaneous injection, 10 mg/kg
	Applications:	Mice with large established s.c. xenografted PC-3 tumors received a 3-day continuous infusion of YM155 at 10 mg/kg. Saline control animals showed rapid tumor growth from day 0 (366 mm3) to day 7 (1,123 mm3), with no change in intratumoral surviving and actin protein levels. In contrast, animals treated with YM155 showed tumor regression from day 0 (292 mm3) to day7 (162 mm3), and a clear decrease in intratumoral survivin levels on days 3 and 7 was observed.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

1. Hou LJ, Huang XX, et al. "YM155 enhances docetaxel efficacy in ovarian cancer." Am J Transl Res. 2018 Mar 15;10(3):696-708.PMID:29636860

2.GAO, JH, et al. "YM155 inhibits tumor growth and enhances chemosensitivity to cisplatin in osteosarcoma." Eur Rev Med Pharmacol Sci 19.11 (2015): 2062-2069.

See more customer validations on www.apexbt.com.

References

[1] Nakahara T, Takeuchi M, Kinoyama I, et al. YM155, a novel small-molecule survivin suppressant, induces regression of established human hormone-refractory prostate tumor xenografts. Cancer research, 2007, 67(17): 8014-8021.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

APExBIO Technology
www.apexbt.com
7505 Fannin street, Suite 410, Houston, TX 77054.
Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com