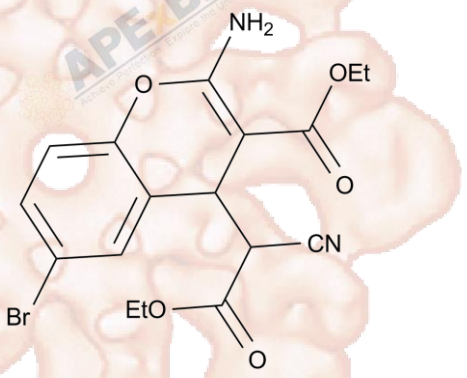
Product Data Sheet

HA14-1

Cat. No.: A8168
CAS No.: 65673-63-4
Formula: C17H17BrN2O5
M.Wt: 409.23
Synonyms:
Target: Apoptosis
Pathway: Bcl-2 Family
Storage: Desiccate at -20°C



Solvent & Solubility

In Vitro

insoluble in H2O; ⩾20.45 mg/mL in DMSO; ⩾41.53 mg/mL in EtOH with ultrasonic

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	2.4436 mL	12.2181 mL	24.4361 mL
5 mM	0.4887 mL	2.4436 mL	4.8872 mL
10 mM	0.2444 mL	1.2218 mL	2.4436 mL

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

Biological Activity

Shortsummary	Bcl-2 inhibitor,potent and cell-permeable
IC_{50} & Target	9 μM (Bcl-2)

In Vitro

Cell Viability Assay

Cell Line:	HL-60 cells, follicular lymphoma B cell lines, HF1A3, HF4.9 and HF28RA cells
Preparation method:	The solubility of this compound in DMSO is >20.5 mg/mL. 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:	50 μM, 4 h

	Applications:	In HL-60 cells, HA14-1 induced cell death in a dose-dependent manner. HA14-1 (50 μM) caused the loss of viability in more than 90% of the cells. In HL-60 cells, treatment with 50 μM HA14-1 by 3 h displayed the characteristic pattern of DNA fragmentation. HA14-1 decreased cell viability and induced apoptosis in follicular lymphoma B cell lines, HF1A3, HF4.9 and HF28RA cells. HA14-1 (10-20 μmol/L) increased sensitivity of human glioblastoma cells to radiotherapy-induced apoptosis and chemotherapy-induced apoptosis.
In Vivo	**Animal experiment**	
	Animal models:	Swiss nude mice challenged with BeGBM cells
	Dosage form:	Intraperitoneal injection, 400 nM, once weekly from day 2
	Applications:	In Swiss nude mice challenged with BeGBM cells, HA14-1 (400 nmol, once weekly from day 2) did not have any significant effect on the growth of glioblastoma tumors in immunodeficient mice. HA14-1 (400 nM) increased the effect of the DNA-damaging agent etoposide (2.5 mg/kg) on glioblastoma growth in vivo.
	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

See more customer validations on www.apexbt.com.

References

[1]. Wang J L, Liu D, Zhang Z J, et al. Structure-based discovery of an organic compound that binds Bcl-2 protein and induces apoptosis of tumor cells[J]. Proceedings of the National Academy of Sciences, 2000, 97(13): 7124-7129.

[2]. Skommer J, Wlodkowic D, Mtt M, et al. HA14-1, a small molecule Bcl-2 antagonist, induces apoptosis and modulates action of selected anticancer drugs in follicular lymphoma B cells[J]. Leukemia research, 2006, 30(3): 322-331.

[3]. Manero F, Gautier F, Gallenne T, et al. The small organic compound HA14-1 prevents Bcl-2 interaction with Bax to sensitize malignant glioma cells to induction of cell death[J]. Cancer research, 2006, 66(5): 2757-2764.

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.

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