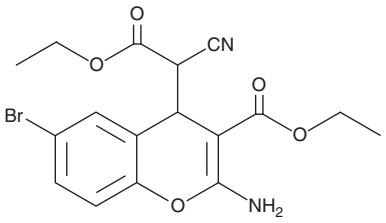
PRODUCT INFORMATION

HA-14-1

Item No. 14876

CAS Resistry No.:	927635-64-1
Formal Name:	(αR,4R)-*rel*-2-amino-6-bromo-α-cyano-3-(ethoxycarbonyl)-4H-1-benzopyran-4-acetic acid, ethyl ester
MF:	$C_{17}H_{17}BrN_2O_5$
FW:	409.2
Purity:	≥95% (mixture of isomers)
UV/Vis.:	λ_{max}: 230, 274 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

HA-14-1 is supplied as a crystalline solid. A stock solution may be made by dissolving the HA-14-1 in the solvent of choice, which should be purged with an inert gas. HA-14-1 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of HA-14-1 in these solvents is approximately 20, 16, and 5 mg/ml, respectively.

HA-14-1 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, HA-14-1 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. HA-14-1 has a solubility of approximately 0.1 mg/ml in a 1:9 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

HA-14-1 is a small molecule that binds the surface pocket of Bcl-2 proteins (IC_{50} = ~ 9 µM) and induces apoptosis by interfering with its interaction with the Bak peptide and activating Apaf-1 and caspase-9 and -3.[1] It can also bind to the antiapoptotic Bcl-2 proteins Bcl-xl and Bcl-W.[2] HA-14-1 has been shown to induce apoptosis of human acute myeloid leukemia (HL-60) cells (50 µM induces 90% loss of viability).[1]

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. *Proc. Natl. Acad. Sci. USA* **97(13)**, 7124-7129 (2000).
2. Azmi, A.S. and Mohammad, R.M. Non-peptidic small molecule inhibitors against Bcl-2 for cancer therapy. *J. Cell Physiol.* **218(1)**, 13-21 (2009).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM