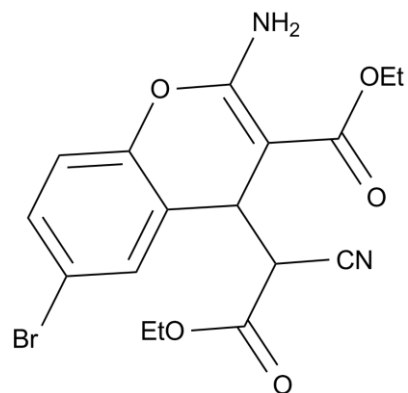


## Product Data Sheet

### Chemical Properties

**Product Name:** HA14-1  
**Cas No.:** 65673-63-4  
**M.Wt:** 409.23  
**Formula:** C<sub>17</sub>H<sub>17</sub>BrN<sub>2</sub>O<sub>5</sub>



**Chemical Name:** ethyl  
2-amino-6-bromo-4-(1-cyano-2-ethoxy-2-oxoethyl)-4H-chromene-3-carboxylate

**Canonical SMILES:** CCOC(=O)C1=C(OC2=C(C1C(C#N)C(=O)OCC)C=C(C=C2)Br)N

**Solubility:** >20.5mg/mL in DMSO

**Storage:** Desiccate at -20°C

**General tips:** For obtaining a higher solubility, please warm the tube at 37° C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20° C for several months.

**Shopping Condition:** Evaluation sample solution : ship with blue ice  
All other available size: ship with RT, or blue ice upon request

### Biological Activity

**Targets :** Apoptosis

**Pathways:** Bcl-2 Family

#### Description:

HA14-1 is a potent small-molecule inhibitor of B-cell lymphoma 2 (Bcl-2), a protein factor binding to and inactivating pro-apoptotic proteins (such as Bax and BH3-only family proteins) to suppress apoptosis, that potently inhibits the anti-apoptotic of Bcl-2 and induces apoptosis with values of 50% inhibition concentration IC<sub>50</sub> ranging from 10 to 20 μM in NIH3T3, HL60 and lung cancer

H1299 cell lines. HA14-1 binds to Bcl-2 by mimicking the BH3 domain required for homo- and hetero-dimer formation and hence prevents the binding of these proteins subsequently resulting in the inhibition of Bcl-2. HA14-1 has been widely investigated in studies of apoptosis, which potentiates it to be used for the treatment of cancer.

**Reference:**

*Chen J, Freeman A, Liu J, Dai Q, Lee RM. The apoptotic effect of HA14-1, a Bcl-2-interacting small molecular compound, requires Bax translocation and is enhanced by PK11195. Mol Cancer Ther. 2002 Oct;1(12):961-7.*

*Niino S, Nakamura Y, Hirabayashi Y, Nagano-Ito M, Ichikawa S. A small molecule inhibitor of Bcl-2, HA14-1, also inhibits ceramide glucosyltransferase. Biochem Biophys Res Commun. 2013 Apr 5;433(2):170-4. doi: 10.1016/j.bbrc.2013.02.052. Epub 2013 Feb 26.*

## 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**

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