Product Name: NSC 687852 (b-AP15)

Revision Date: 6/30/2016

Product Data Sheet

Chemical Properties

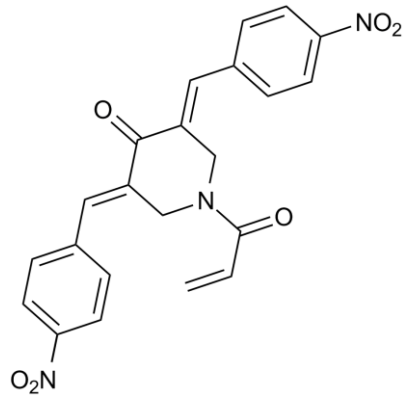
Product Name: NSC 687852 (b-AP15)

Cas No.: 1009817-63-3

M.Wt: 419.39

Formula: C22H17N3O6

Synonyms: b-AP15



Chemical Name: (3E,5E)-3,5-bis[(4-nitrophenyl)methylidene]-1-prop-2-enoylpiperidin-4-one

Canonical SMILES: C=CC(=O)N1CC(=CC2=CC=C(C=C2)[N+](=O)[O-])C(=O)C(=CC3=CC=C(C=C3)[N+](=O)[O-])C1

Solubility: >21mg/mL in DMSO

Storage: Store at 4°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: Apoptosis Inducers

Description:

IC50: N/A
NSC 687852 is a 19S regulatory particle inhibitor.
The 19S particles bind polyubiquitin-linked polypeptides and present them to the 20S degradative units. USP14 and UCHL5 are cysteine enzymes that become activated after being

associated with the proteasome.
In vitro: NSC 687852 blocked deubiquitylating activity of USP14 and UCHL5 selectively without inhibiting proteasome activity. NSC 687852 decreased viability in multiple myeloma (MM) cell lines and patient MM cells, inhibited MM cell proliferation even in the presence of bone marrow stroma cells, and overcomed bortezomib resistance. Anti-MM activity of NSC 687852 was associated with growth arrest through downregulating CDC2, CDC25C, and cyclin B1, as well as induction of caspase-dependent apoptosis and activation of unfolded protein response [1].
In vivo: In vivo studies using distinct human MM xenograft models showed that NSC 687852 was well tolerated, inhibited tumor growth, and prolonged mouse survival. Combination of NSC 687852 with suberoylanilide hydroxamic acid, lenalidomide, or dexamethasone was found to induce synergistic anti-MM activity [1].
Clinical trial: N/A

***Reference**:*

[1] Ze Tian,Padraig D'Arcy,Xin Wang,Arghya Ray,Yu-Tzu Tai,Yiguo Hu,Ruben D Carrasco,Paul Richardson,Stig Linder,Dharminder Chauhan,Kenneth C Anderson. A novel small molecule inhibitor of deubiquitylating enzyme USP14 and UCHL5 induces apoptosis in multiple myeloma and overcomes bortezomib resistance. Blood. 2014 Jan 30; 123(5): 706–716.

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