

Product Data Sheet

Chemical Properties

Product Name:	Pomalidomide (CC-4047)
Cas No.:	19171-19-8
M.Wt:	273.2
Formula:	C13H11N3O4
Synonyms:	Actimid,4-Aminothalidomide,C NH ₂ C 4047
Chemical Name:	4-amino-2-(2,6-dioxopiperidin-3-yl)isoindole-1,3-dione
Canonical SMILES:	C1CC(=O)NC(=O)C1N2C(=O)C3=C(C2=O)C(=CC=C3)N
Solubility:	Soluble in DMSO > 10 mM
Storage:	Store at -20°C
General tips:	For obtaining a higher solubility , please warm the tube at 37 $^{\circ}$ C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20 $^{\circ}$ 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 :	TNF-α
Pathways:	Apoptosis >> TNF-α

Description:

Pomalidomide, previously known as CC-4047 or actimid, is a potent immunomodulatory molecule that exhibits antineoplastic activity for the treatment of hematological malignancies, especially relapsed and refractory multiple myeloma (MM). As a derivative of thalidomide, pomalidomide has a similar chemical structure as thalidomide except for the addition of two oxo groups in the phthaloyl ring and an amino group at the fourth position. Generally, as an immunomodulatory molecule, pomalidomide demonstrates antitumor activity through a mechanism of blocking the tumor microenvironment by modulation of tumor-supporting

cytokines (TNF- α , IL-6, IL-8 and VEGF), directly down-regulating key functions of tumor cells, and engaging support from non-immune host cells.

Reference:

AA Chanan-Khan, A Swaika, A Paulus, SK Kumar, JR Mikhael, SV Rajkumar, A Dispenzieri, and MQ Lacy. Pomalidomide: the new immunomodulatory agent for the treatment of multiple myeloma. Blood Cancer Journal (2013) 3, el43

Evangelos Terpos, Nikolaos Kanellias, Dimitrios Christoulas, Efstathios Kastritis, and Meletios A Dimopoulos. Pomalidomide: a novel drug to treat relapsed and refractory multiple myeloma. Onco Targets Ther 2013; 6: 531-538

Product Validation



Decrease of CRBN in the presence of Pomalidomide

Level of CRBN.p21,and IRF4 in the presence of Lenalidomide Pomalidomide

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