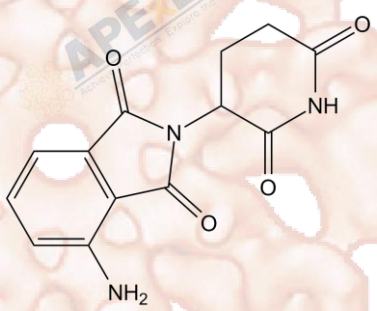
Product Data Sheet

Pomalidomide (CC-4047)

Cat. No.:	A4212
CAS No.:	19171-19-8
Formula:	C13H11N3O4
M.Wt:	273.2
Synonyms:	Actimid,4-Aminothalidomide,CC 4047
Target:	Apoptosis
Pathway:	TNF-α
Storage:	Store at -20°C



Solvent & Solubility

In Vitro

insoluble in EtOH; insoluble in H2O; ⩾7.5 mg/mL in DMSO

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	3.6603 mL	18.3016 mL	36.6032 mL
5 mM	0.7321 mL	3.6603 mL	7.3206 mL
10 mM	0.3660 mL	1.8302 mL	3.6603 mL

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

Biological Activity

Shortsummary	Immunomodulator,antumor/anti-angiogenic
IC_{50} & Target	13 nM (TNF-α)

In Vitro

Cell Viability Assay

Cell Line:	Human CD34+ erythroid progenitor cells
Preparation method：	The solubility of this compound in DMSO is >10 mM. 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:	1 μM; 2, 6, 9, and 12 days

	Applications:	Pomalidomide at 1 μM increased HbF production in human erythroid cells. After 6 days, Pomalidomide at 1 μM induced γ-globin mRNA levels upregulation 2-fold while decreased β-globin levels 2-fold.
In Vivo	**Animal experiment**	
	Animal models:	Murine central nervous system (CNS) lymphoma models
	Dosage form:	3 mg/kg, 10 mg/kg, or 30 mg/kg by oral gavage daily for 28 days
	Applications:	Pomalidomide (3, 10, and 30 mg/kg) showed significant therapeutic activity with significant reduction in tumor growth rate and prolongation of survival in two CNS lymphoma models.
	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. Muller, G. W., Chen, R., Huang, S. Y., Corral, L. G., Wong, L. M., Patterson, R. T., Chen, Y., Kaplan, G. and Stirling, D. I. (1999) Amino-substituted thalidomide analogs: potent inhibitors of TNF-alpha production. Bioorg Med Chem Lett. 9, 1625-163

2. Moutouh-de Parseval, L. A., Verhelle, D., Glezer, E., Jensen-Pergakes, K., Ferguson, G. D., Corral, L. G., Morris, C. L., Muller, G., Brady, H. and Chan, K. (2008) Pomalidomide and lenalidomide regulate erythropoiesis and fetal hemoglobin production in human CD34+ cells. J Clin Invest. 118, 248-258

3. Li, Z., Qiu, Y., Personett, D., Huang, P., Edenfield, B., Katz, J., Babusis, D., Tang, Y., Shirely, M. A., Moghaddam, M. F., Copland, J. A. and Tun, H. W. (2013) Pomalidomide shows significant therapeutic activity against CNS lymphoma with a major impact on the tumor microenvironment in murine models. PLoS One. 8, e71754

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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