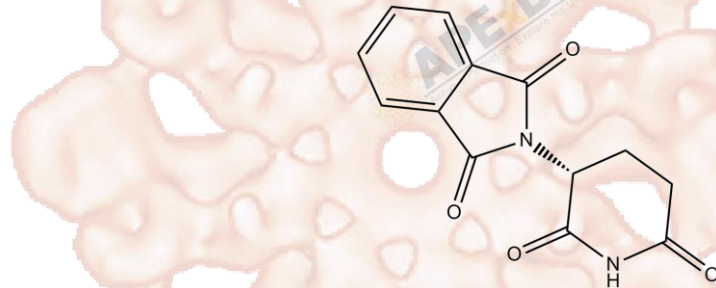


# Product Data Sheet

## Thalidomide

<b>Cat. No.:</b>	A4216
<b>CAS No.:</b>	50-35-1
<b>Formula:</b>	C <sub>13</sub> H <sub>10</sub> N <sub>2</sub> O <sub>4</sub>
<b>M.Wt:</b>	258.23
<b>Synonyms:</b>	
<b>Target:</b>	Apoptosis
<b>Pathway:</b>	TNF- $\alpha$
<b>Storage:</b>	Store at -20°C



## Solvent & Solubility

insoluble in H<sub>2</sub>O; insoluble in EtOH;  $\geq 11.8$  mg/mL in DMSO

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	<b>Concentration</b>			
	<b>1 mM</b>	3.8725 mL	19.3626 mL	38.7252 mL
	<b>5 mM</b>	0.7745 mL	3.8725 mL	7.7450 mL
	<b>10 mM</b>	0.3873 mL	1.9363 mL	3.8725 mL

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

## Biological Activity

Shortsummary

Immunomodulatory agent, sedative drug, angiogenesis inhibitor

IC<sub>50</sub> & Target

In Vitro

### Cell Viability Assay

Cell Line: PBMCs

Preparation method: The solubility of this compound in DMSO is > 11.8 mg/mL. 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: 0 ~ 100  $\mu$ g/mL

	Applications:	Thalidomide dose-dependently increased the proliferative responses of PBMCs stimulated by immobilized anti-CD3. As the concentration of anti-CD3 increased, Thalidomide at a constant concentration of 10 µg/mL significantly induced the proliferative responses of PBMCs. However, Thalidomide exhibited no effect on the proliferative response in the absence of anti-CD3. These results indicated that Thalidomide was not mitogenic, Instead, it acted as a costimulator.
In Vivo	<b>Animal experiment</b>	
	Animal models:	Rabbits
	Dosage form:	200 mg/kg; p.o.
	Applications:	In rabbits, Thalidomide at the dose of 200 mg/kg inhibited the area of vascularized cornea, with a median inhibition of 36%. The inhibition of Thalidomide on angiogenesis was seen after only two doses. In addition, the rabbits did not show significant sedation, and there were no signs of toxicity or weight loss.
	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](http://www.apexbt.com).

## References

- [1]. Haslett PA, Corral LG, Albert M, Kaplan G. Thalidomide costimulates primary human T lymphocytes, preferentially inducing proliferation, cytokine production, and cytotoxic responses in the CD8+ subset. J Exp Med. 1998 Jun 1;187(11):1885-92.
- [2]. D'Amato RJ, Loughnan MS, Flynn E, Folkman J. Thalidomide is an inhibitor of angiogenesis. Proc Natl Acad Sci U S A. 1994 Apr 26;91(9):4082-5.

## 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 APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term 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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