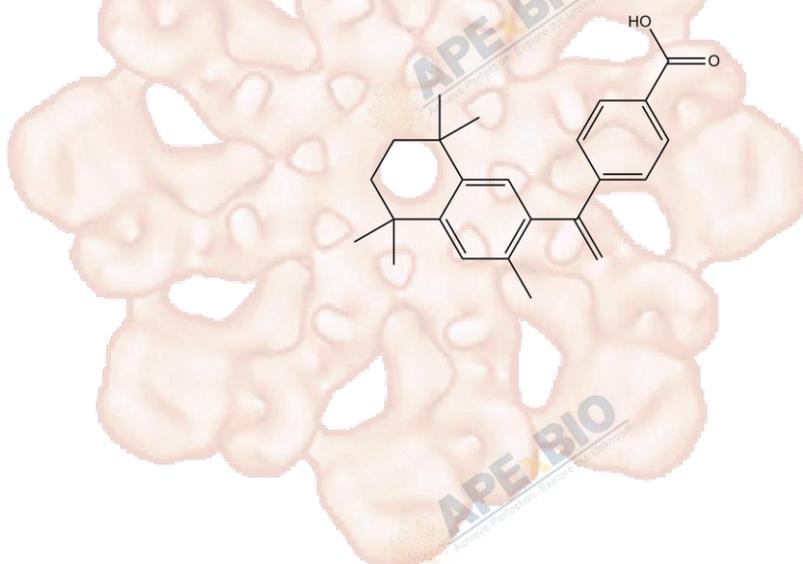


## Product Data Sheet

### Bexarotene

<b>Cat. No.:</b>	A8380
<b>CAS No.:</b>	153559-49-0
<b>Formula:</b>	C <sub>24</sub> H <sub>28</sub> O <sub>2</sub>
<b>M.Wt:</b>	348
<b>Synonyms:</b>	
<b>Target:</b>	Others
<b>Pathway:</b>	Retinoid X Receptors
<b>Storage:</b>	Store at -20°C



### Solvent & Solubility

insoluble in H<sub>2</sub>O;  $\geq 10.35$  mg/mL in DMSO;  $\geq 11.34$  mg/mL in EtOH

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	<b>Concentration</b>			
	<b>1 mM</b>	2.8736 mL	14.3678 mL	28.7356 mL
	<b>5 mM</b>	0.5747 mL	2.8736 mL	5.7471 mL
	<b>10 mM</b>	0.2874 mL	1.4368 mL	2.8736 mL

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

### Biological Activity

Shortsummary

Retinoid Receptor agonist

IC<sub>50</sub> & Target

In Vitro

#### Cell Viability Assay

Cell Line:	MJ, Hut78 and HH cell lines
Preparation method:	The solubility of this compound in DMSO is > 10.4 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:	0.1, 1 and 10 $\mu$ M; 24, 48, 72 and 96 hrs

	Applications:	In MJ, Hut78 and HH cell lines, Bexarotene treatment for 96 hrs dose-dependently inhibited cell growth. In addition, Bexarotene increased the number of cells in the sub-G1 phase in a dose-dependent manner, which was accompanied by a loss of cells in the G1, S, and G2-M phases. However, Bexarotene did not show significant inhibition effect on cell growth and apoptosis at the dose of 0.1 to 10 $\mu$ M over the period of 24 to 72 hrs in all 3 cell lines.
In Vivo	<b>Animal experiment</b>	
	Animal models:	MMTV-erbB2 mice
	Dosage form:	100 mg/kg; p.o.; q.d., 6 days per week
	Applications:	In MMTV-erbB2 mice, Bexarotene treatment prevented the development of hyperplasias or mammary intraepithelial neoplasia (MIN) lesions. Moreover, Bexarotene significantly inhibited mammary gland proliferation after 2- and 4-month treatments. The immunohistochemical results showed that less than 1% of mammary epithelial cells in the Bexarotene treatment group showed positive caspase 3 staining, indicating that the cancer preventive effect of Bexarotene was not attributed to the induction of apoptosis.
	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]. Zhang C, Hazarika P, Ni X, Weidner DA, Duvic M. Induction of apoptosis by bexarotene in cutaneous T-cell lymphoma cells: relevance to mechanism of therapeutic action. Clin Cancer Res. 2002 May;8(5):1234-40.
- [2]. Li Y, Zhang Y, Hill J, Kim HT, Shen Q, Bissonnette RP, Lamph WW, Brown PH. The retinoid, bexarotene, prevents the development of premalignant lesions in MMTV-erbB2 mice. Br J Cancer. 2008 Apr 22;98(8):1380-8.

## 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. 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](http://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](mailto:info@apexbt.com)

