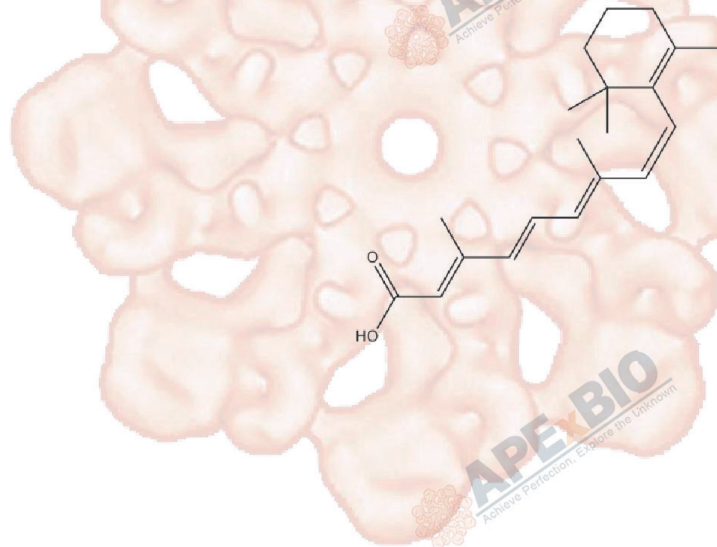


# Product Data Sheet

## Tretinoin (Aberela)

<b>Cat. No.:</b>	A8539
<b>CAS No.:</b>	302-79-4
<b>Formula:</b>	C <sub>20</sub> H <sub>28</sub> O <sub>2</sub>
<b>M.Wt:</b>	300.4
<b>Synonyms:</b>	
<b>Target:</b>	Others
<b>Pathway:</b>	RARs
<b>Storage:</b>	Store at -20°C



### Solvent & Solubility

insoluble in H<sub>2</sub>O; ≥11.9 mg/mL in DMSO; ≥5.77 mg/mL in EtOH with ultrasonic

In Vitro	Preparing Stock Solutions	Mass			
		Solvent Concentration	1mg	5mg	10mg
		<b>1 mM</b>	3.3289 mL	16.6445 mL	33.2889 mL
		<b>5 mM</b>	0.6658 mL	3.3289 mL	6.6578 mL
		<b>10 mM</b>	0.3329 mL	1.6644 mL	3.3289 mL

Please refer to the solubility information to select the appropriate solvent

### Biological Activity

Shortsummary	retinoic acid, treats acne vulgaris and keratosis pilaris	
IC <sub>50</sub> & Target		
In Vitro	<b>Cell Viability Assay</b>	
	Cell Line:	Mesangial cells
	Preparation method:	The solubility of this compound in DMSO is > 11.9 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 ~ 25 μM; 0 ~ 24 hrs	

	Applications:	Tretinoin prevented H <sub>2</sub> O <sub>2</sub> -induced cell damage by increasing both the catalase activity and the reduced glutathione level in dose- and time-dependent manners. In mesangial cells, Tretinoin increased the levels of catalase mRNA and gamma-glutamyl-cysteine synthetase (catalytic subunit) mRNA, the latter being involved in the rate-limiting step for the de novo synthesis of reduced glutathione.
In Vivo	<b>Animal experiment</b>	
	Animal models:	Male Fischer 344 rats
	Dosage form:	1 mg/kg/day; p.o.
	Applications:	In male Fischer 344 rats, Tretinoin at the dose of 1 mg/kg/day did not caused any toxic effect. Compared with age-matched control animals, rats treated with Tretinoin showed lower protein content in the renal cortex. But there was no difference in the DNA content of the renal cortex between the control group and the Tretinoin treatment group.
	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]. Manzano VM, Puyol MR, Puyol DR, et al. Tretinoin prevents age-related renal changes and stimulates antioxidant defenses in cultured renal mesangial cells. J Pharmacol Exp Ther, 1999, 289(1): 123-132.

## 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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