

# Product Data Sheet

## Glatiramer acetate

**Cat. No.:** B4978  
**CAS No.:** 147245-92-9  
**Formula:** C<sub>25</sub>H<sub>45</sub>N<sub>5</sub>O<sub>13</sub>  
**M.Wt:** 623.65  
**Synonyms:**  
**Target:**  
**Pathway:**  
**Storage:** Store at -20°C



## Solvent & Solubility

insoluble in EtOH; insoluble in DMSO;  $\geq 65$  mg/mL in H<sub>2</sub>O

In Vitro

	Solvent	Concentration	Mass		
			1mg	5mg	10mg
Preparing Stock Solutions		1 mM	1.6035 mL	8.0173 mL	16.0346 mL
		5 mM	0.3207 mL	1.6035 mL	3.2069 mL
		10 mM	0.1603 mL	0.8017 mL	1.6035 mL

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

## Biological Activity

Shortsummary

immunomodulator

IC<sub>50</sub> & Target

In Vitro

### Cell Viability Assay

Cell Line:	Immature CD1a+CD14-DC
Preparation method:	Soluble in DMSO. 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:	1-10 $\mu$ M, 48 h

	Applications:	Glatiramer acetate (GA) selectively inhibited cytokine production by tissue-type sentinel DC. During their maturation of DC, exposure to GA reduced IL-12p70-producing capacity upon subsequent CD40L-dependent activation. DC exposed to GA during maturation induced the development of IL-4-secreting Th2 cells with elevated IL-10-secreting capacity.
In Vivo	<b>Animal experiment</b>	
	Animal models:	C57BL/6 and (SJL/JxBALB/c)F1 female mice
	Dosage form:	2 mg per mouse, 8 to 10 daily, s.c. injections
	Applications:	GA treatment led to sustained augmentation of the expression of BDNF, NT-3, and NT-4 in various brain regions.
	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]. Vieira P L, Heystek H C, Wormmeester J, et al. Glatiramer acetate (copolymer-1, copaxone) promotes Th2 cell development and increased IL-10 production through modulation of dendritic cells[J]. The Journal of Immunology, 2003, 170(9): 4483-4488.
- [2]. Aharoni R, Eilam R, Domev H, et al. The immunomodulator glatiramer acetate augments the expression of neurotrophic factors in brains of experimental autoimmune encephalomyelitis mice[J]. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102(52): 19045-19050.

## 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.

---

## APEX<sup>®</sup>BIO 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)

