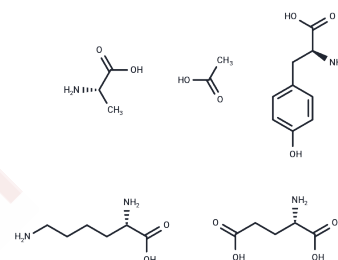


glatiramer Acetate

Chemical Properties

CAS No. :	147245-92-9
Formula:	C ₂₅ H ₄₅ N ₅ O ₁₃
Molecular Weight:	623.65
Storage:	Keep away from moisture Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	Glatiramer acetate (GA) is a synthetic amino acid copolymer that is approved for treatment of relapsing remitting multiple sclerosis (RRMS) and clinically isolated syndrome (CIS).
Targets(IC50)	Others
In vivo	Groups of CAG140 knock-in and N171-82Q transgenic mice were treated with GA (0.625 mg/mouse) for up to 1 year of age (CAG140 knock-in mice) or 20 weeks (N171-82Q mice). Various behavioral assays were measured over the course of drug treatment whereby GA treatment delayed the onset and reduced the severity of HD behavioral symptoms in both mouse models. The beneficial actions of GA were associated with elevated levels of promoter I- and IV-driven brain-derived neurotrophic factor (Bdnf) expression and reduced levels of cytokines, in particular, interleukins IL4 and IL12, in the brains of HD mice. In addition, the GA-induced effects on BDNF, IL4 and IL12 levels were detected in plasma from drug-treated mice and rats, suggesting utility as a peripheral biomarker of treatment effectiveness. These preclinical studies support the use of GA as a relevant clinical therapy for HD patients[3].

Solubility Information

Solubility	DMSO: Insoluble, H ₂ O: 10 mM, Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
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
50 mM	0.0321 mL	0.1603 mL	0.3207 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Prod'homme T, Zamvil SS. The Evolving Mechanisms of Action of Glatiramer Acetate. Cold Spring Harb Perspect Med. 2019 Feb 1;9(2):a029249. doi: 10.1101/cshperspect.a029249.

McKeage K. Glatiramer Acetate 40 mg/mL in Relapsing-Remitting Multiple Sclerosis: A Review. CNS Drugs. 2015;29(5):425-432.

Arnon R, et al. Mechanism of action of glatiramer acetate in multiple sclerosis and its potential for the development of new applications. Proc Natl Acad Sci U S A. 2004;101 Suppl 2(Suppl 2):14593-14598.

Corey-Bloom J, et al. Beneficial effects of glatiramer acetate in Huntington's disease mouse models: Evidence for BDNF-elevating and immunomodulatory mechanisms. Brain Res. 2017;1673:102-110.

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