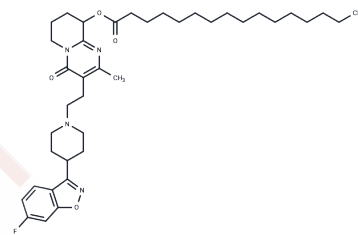


## Paliperidone Palmitate

### Chemical Properties

CAS No. :	199739-10-1
Formula:	C39H57FN4O4
Molecular Weight:	664.89
Storage:	Keep away from moisture, Keep away from direct sunlight 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	Paliperidone Palmitate is the palmitate ester prodrug of paliperidone, acting as a competitive antagonist of dopamine D2 and 5-HT2A receptors that can cross the blood-brain barrier. It regulates neurotransmitter balance to exert antipsychotic activity. Primarily used in schizophrenia research, it is typically formulated as a long-acting injectable (LAI) that forms a sustained-release depot in the muscle tissue.
Targets(IC50)	5-HT Receptor, Dopamine Receptor
In vivo	Intramuscular Paliperidone Palmitate forms a long-acting depot lasting ~20 days. Hyaluronidase increases early exposure without compromising the extended-release profile. Injection-site reactions are species-specific (macrophage infiltration in mice vs. granulomas in rats), influencing biphasic absorption kinetics [1][2].

### Solubility Information

Solubility	DMSO: Soluble, Ethanol: 1.6 mg/mL (2.41 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	1.504 mL	7.520 mL	15.0401 mL
5 mM	0.3008 mL	1.504 mL	3.008 mL
10 mM	0.1504 mL	0.752 mL	1.504 mL
50 mM	0.0301 mL	0.1504 mL	0.3008 mL

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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

Darville N, et al. The effect of macrophage and angiogenesis inhibition on the drug release and absorption from an intramuscular sustained-release paliperidone palmitate suspension. *J Control Release*. 2016 May 28;230:95-108.

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