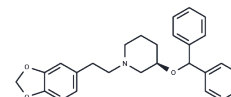


Zamifenacin fumarate

Chemical Properties

CAS No. :	127308-98-9
Formula:	C ₃₁ H ₃₃ N ₀ O ₇
Molecular Weight:	531.6
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Zamifenacin fumarate (UK-76654 fumarate) is a potent, gut-selective antagonist of the muscarinic M3 receptor.
Targets(IC50)	AChR
In vivo	Zamifenacin exhibits terminal elimination half-lives (mouse 2.1, rat 6.0 and, dog 1.1 h) due to high plasma clearance (68, 35, and 39 mL/min/kg respectively combined with large volumes of distribution (12.5, 19.0, and 3.5 L/kg respectively) following intravenous administration (mouse 5.3, rat 5.0 and, dog 1.0 mg/kg)[2].

Solubility Information

Solubility	H ₂ O: 1 mg/mL (1.88 mM), Sonication and heating to 60°C are recommended. DMSO: 55 mg/mL (103.46 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (3.76 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8811 mL	9.4056 mL	18.8111 mL
5 mM	0.3762 mL	1.8811 mL	3.7622 mL
10 mM	0.1881 mL	0.9406 mL	1.8811 mL
50 mM	0.0376 mL	0.1881 mL	0.3762 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

Houghton LA, et al. Zamifenacin (UK-76, 654) a potent gut M3 selective muscarinic antagonist, reduces colonic motor activity in patients with irritable bowel syndrome. *Aliment Pharmacol Ther.* 1997 Jun;11(3):561-8.

Beaumont KC, et al. Pharmacokinetics and metabolism of Zamifenacin in mouse, rat, dog and man. *Xenobiotica.* 1996 Apr;26(4):459-71.

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