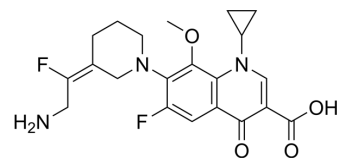


Avarofloxacin

Cat. No.:	HY-16764		
CAS No.:	878592-87-1		
Molecular Formula:	C ₂₁ H ₂₃ F ₂ N ₃ O ₄		
Molecular Weight:	419.42		
Target:	Bacterial; Antibiotic		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (238.42 mM; ultrasonic and adjust pH to 2 with HCl)

Concentration	Solvent	Mass	1 mg	5 mg	10 mg
			1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		2.3842 mL	11.9212 mL	23.8424 mL
	5 mM		0.4768 mL	2.3842 mL	4.7685 mL
	10 mM		0.2384 mL	1.1921 mL	2.3842 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (5.96 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (5.96 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (5.96 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Avarofloxacin (JNJ-Q2) is a broad-spectrum fluoroquinolone antibacterial agent being developed for the treatment of acute bacterial skin and skin-structure infections and community-acquired pneumonia^[1]. Avarofloxacin (JNJ-Q2) is an aminoethylidene piperidine fluoroquinolone that demonstrates antibacterial effect against numerous Gram-positive bacteria with a mean 0.12 mg/L MIC90 value^[2]. Avarofloxacin (JNJ-Q2) has potential for treatment of methicillin-resistant *Staphylococcus aureus* (MRSA) infections^[3].

IC₅₀ & Target

Quinolone

REFERENCES

- [1]. Jones TM, et al. Focus on JNJ-Q2, a novel fluoroquinolone, for the management of community-acquired bacterial pneumonia and acute bacterial skin and skin structure infections.
- [2]. Kocsis B, et al. Chemical structure and pharmacokinetics of novel quinolone agents represented by avarofloxacin, delafloxacin, finafloxacin, zabofloxacin and nemonoxacin. *Ann Clin Microbiol Antimicrob.* 2016 May 23;15(1):34.
- [3]. Farrell DJ, et al. JNJ-Q2, a new fluoroquinolone with potent in vitro activity against *Staphylococcus aureus*, including methicillin- and fluoroquinolone-resistant strains. *Antimicrob Agents Chemother.* 2011 Jul;55(7):3631-4.
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Caution: Product has not been fully validated for medical applications. For research use only.

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