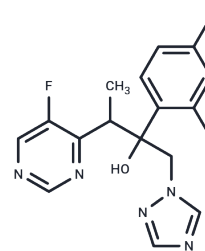


## Voriconazole

## Chemical Properties

CAS No. :	137234-62-9
Formula:	C <sub>16</sub> H <sub>14</sub> F <sub>3</sub> N <sub>5</sub> O
Molecular Weight:	349.31
Storage:	Store at low temperature Powder: -20°C for 3 years   In solvent: -80°C for 1 year <i>Actual storage temperature shall be subject to the COA.</i>



## Biological Description

Description	Voriconazole (UK-109496) is a triazole antifungal agent that specifically inhibits STEROL 14-ALPHA-DEMETHYLASE and CYTOCHROME P-450 [CYP3A].
Targets(IC50)	Antibacterial, Antifection, Antifungal
In vitro	Intraperitoneal administration of 5 mg/kg Voriconazole combined with 1.25 mg/kg Amphotericin B significantly reduces fungal counts in selected tissues of guinea pigs when compared to control groups. Furthermore, Voriconazole at 5 mg/kg, when combined with any dose of Caspofungin Acetate, decreases tissue fungal loads, specifically demonstrating a significant reduction in the number of positive cultures. In immunocompromised guinea pigs with pulmonary aspergillosis, Voriconazole effectively reduces pulmonary Aspergillus spp. counts, displaying superior results to those observed with Itraconazole.
In vivo	In vitro, Voriconazole exhibits greater or comparable antifungal activity against most tested molds than Itraconazole and Amphotericin B. Voriconazole effectively inhibits certain conditioned filamentous fungi and dimorphic fungi (molds), as well as yeast species. At concentrations of $\leq 1$ $\mu$ g/mL, Voriconazole can inhibit 95% of fungal strains.

## Solubility Information

Solubility	H <sub>2</sub> O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: 16 mg/mL (45.8 mM), Sonication is recommended. DMSO: 247 mg/mL (707.11 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: 5 mg/mL (14.31 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	2.8628 mL	14.3139 mL	28.6279 mL
5 mM	0.5726 mL	2.8628 mL	5.7256 mL
10 mM	0.2863 mL	1.4314 mL	2.8628 mL
50 mM	0.0573 mL	0.2863 mL	0.5726 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

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