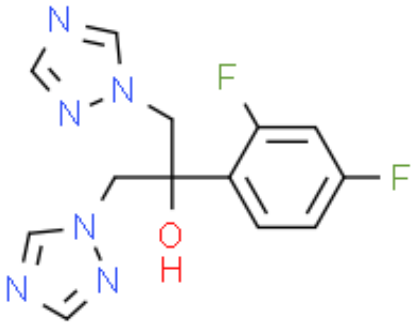
Product Data Sheet

Cas No.:	86386-73-4	Cat. No:	PC12932
Product Name:	Fluconazole.		
Product synonym:	氟康唑;2-(2,4-二氟苯基)-1,3-双(1H-1,2,4-三唑-1-基)-2-丙醇;大扶康;麦道氟康;A-(2,4-二氟苯基)-A-(1H-1,2,4-三唑-1-基甲基)-1H-1,2,4-三唑-1-基乙醇;2-(2,4-二氟苯基)-1,3-双(1H-1,2,4-三氮唑-1-基)-2-丙醇;Fluconazole 氟康唑;zzstandard 品牌 氟康唑对照品;博柔霉素;氟康唑 EP标准品;氟康唑 Fluconazole;氟康唑 USP31;氟康唑 USP标准品;氟康唑 标准品;氟康唑的用途以及物理性状;氟康唑峰鉴别 EP标准品;氟康唑工厂;氟康唑杂质;氟康唑杂质对照品;氟康唑中间体;格列本脲;抗真菌药氟康唑;赛庚啶;盐酸环苯扎林;A-(2,4-二氟苯基)-A-(1H-1,2,4-三唑-1-基甲基)-1H-1,2,4-三;氟康唑,大扶康,麦道氟康;福司氟康唑杂质A;福司氟康唑杂质1;氟康唑，医药级,纯度:>99%;高纯度，氟康唑原粉，可小包装零售		
Chemical name:	Fluconazole.		
MF:	C13H12F2N6O	FW:	306.2708
Purity:	≥98%	Batch No.:	-
Storage:			
Structural formula:			
λmax:	-	Formulation:	-
Solubility :			
SMILES :	FC1C([H])=C(C([H])=C([H])C=1C(C([H])([H])N1C([H])=NC([H])=N1)(C([H])([H])N1C([H])=NC([H])=N1)O[H])F		
InChI Code:	-		
InChI Key:			
WARNING This product is not for human or veterinary use.			

Product Description

三唑抗真菌剂，Fluconazole是抗真菌化合物，可用于表面和全身性的真菌感染。

生物活性	Fluconazole (UK-49858) is a triazole **antifungal** agent with excellent activities against a broad range of fungi, especially against *Candida albicans*. Fluconazole inhibits *C. albicans* and *Candida kefyr* with IC_{99}s range from 0.20 μg/mL to 0.39 μg/mL.

体外研究(In Vitro)

Fluconazole inhibits 4 species of*Aspergillus fumigatus* with the IC_{50}s of 23.9-43.5 μg/mL. Fluconazole (0.20 μg/mL) inhibits significantly the mycelial-phase growth and germ tube elongation of *C. albicans* in a medium supplemented with serum. Fluconazole is a triazole antifungal agent that has been available for the treatment of infections due to *Candida*, *Cryptococcus*. The MIC_{90} is highest for *C. krusei* (MIC ≥ 64 μg/mL) and *C. glabrata* (MIC, 32 μg/mL) and is ≤2 μg/mL for *C. albicans* (0.5 μg/mL), *C. parapsilosis* (2 μg/mL), *C. tropicalis* (2 μg/mL), *C. lusitaniae* (2 μg/mL), and *C. kefyr* (0.5 μg/mL).
Fluconazole (0.1-50.0 μg/mL) damages the fungal cells and reduces their viability.

Medlife has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay

Cell Line:	*C.albicans* yeast cells (strain ATCC 26310 and strain TW)
Concentration:	0.1, 0.5, 5.0, 50.0 μg/mL
Incubation Time:	24 hours
Result:	The MICs against both strains were 0.5 μg/mL.

体内研究(In Vivo)

Fluconazole (0, 0.5, 1, 2.5, 5, 7.5, and 10 mg/kg; administered intraperitoneally (i.p.) as a single dose) results in a 50% reduction in fungal densities (ED50) of 4.87 mg/kg in a murine model of systemic candidiasis. Fluconazole exhibits terminal elimination half-life of 2.4 h) following i.p. administration.The terminal half-life does not change with the dose of fluconazole administered.

Medlife has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Female NYLAR mice (weight, 18 to 20 g; infected intravenously with *C. albicans* blastoconidia)
Dosage:	5, 10, 15 and 20 mg/kg (Pharmacokinetic Analysis)
Administration:	Given i.p. as a single dose
Result:	$T_{1/2}$=2.4 h

包装储存

Powder	**-20°C**	3 years
	4°C	2 years
In solvent	**-80°C**	6 months
	-20°C	1 month

体外研究:

DMSO : ≥ 100 mg/mL (326.51 mM)

H_2O : 2 mg/mL (6.53 mM; Need ultrasonic)

* "≥" means soluble, but saturation unknown.

配制储备溶液	溶剂体积 / 质量 / 浓度	1 mg	5 mg	10 mg
	1 mM	3.2651 mL	16.3255 mL	32.6509 mL
	5 mM	0.6530 mL	3.2651 mL	6.5302 mL
	10 mM	0.3265 mL	1.6325 mL	3.2651 mL

* 产品不同，其溶解度不同。建议根据产品选择合适的溶剂配制储备溶液；配成溶液后，**建议分装保存，避免反复冻融造成的产品失效**。
储备液的保存方式和期限：-80°C, 6 months; -20°C, 1 month。-80°C 储存时，建议在 6 个月内使用，-20°C 储存时，

建议在 1 个月内使用。

体内研究:

建议根据您的实验动物和给药方式选择适当的溶解方案。以下溶解方案都建议先按照 **体外研究** 方式配制澄清的储备液，再依次添加助溶剂：

——为保证实验结果的可靠性，**澄清的储备液可以根据储存条件，适当保存**；体内实验的工作液，**建议您现用现配，当天使用**； 以下溶剂前显示的百分比是指**该溶剂在您配制终溶液中的体积占比**；如在配制过程中出现沉淀、析出现象，可以通过**加热和/或超声的方式助溶**

溶解度数据

1. 建议依照次序添加每种溶剂： 10% DMSO 40% PEG300 5% Tween-80 45% saline

   Solubility: ≥ 2.5 mg/mL (8.16 mM); Clear solution

   此方案可获得 ≥ 2.5 mg/mL (8.16 mM，饱和度未知) 的澄清溶液。

   以 1 mL 工作液为例，取 100 μL 25.0 mg/mL 的澄清 DMSO 储备液加到 400 μL PEG300 中，混合均匀；向上述体系中加入50 μL Tween-80，混合均匀；然后继续加入 450 μL生理盐水定容至 1 mL。

   将 0.9 g 氯化钠，完全溶解于 100 mL ddH?O 中，得到澄清透明的生理盐水溶液

2. 建议依照次序添加每种溶剂： 10% DMSO 90% (20% SBE-β-CD in saline)

   Solubility: ≥ 2.5 mg/mL (8.16 mM); Clear solution

   此方案可获得 ≥ 2.5 mg/mL (8.16 mM，饱和度未知) 的澄清溶液。

   以 1 mL 工作液为例，取 100 μL 25.0 mg/mL 的澄清 DMSO 储备液加到 900 μL 20% 的 SBE-β-CD 生理盐水水溶液中，混合均匀。

   将 2 g 磺丁基醚 β-环糊精加入 5 mL 生理盐水中，再用生理盐水定容至 10 mL，完全溶解，澄清透明

3. 建议依照次序添加每种溶剂： 10% DMSO 90% corn oil

   Solubility: ≥ 2.5 mg/mL (8.16 mM); Clear solution

   此方案可获得 ≥ 2.5 mg/mL (8.16 mM，饱和度未知) 的澄清溶液，此方案不适用于实验周期在半个月以上的实验。

   以 1 mL 工作液为例，取 100 μL 25.0 mg/mL 的澄清 DMSO 储备液加到 900 μL玉米油中，混合均匀。

4. 建议依照次序添加每种溶剂： PBS

   Solubility: 2 mg/mL (6.53 mM); Clear solution; Need ultrasonic and warming and heat to 60°C

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