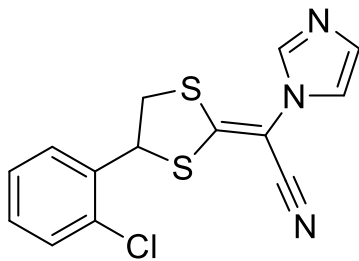


Product data sheet



MedKoo Cat#: 598304 Name: Lanoconazole CAS: 101530-10-3 Chemical Formula: C ₁₄ H ₁₀ ClN ₃ S ₂ Exact Mass: 319.0005 Molecular Weight: 319.825		
Product supplied as:	Powder	
Purity (by HPLC):	≥ 98%	
Shipping conditions	Ambient temperature	
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.	

1. Product description:

Lanoconazole is a topical antifungal agent.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	100.0	312.67

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	3.13 mL	15.63 mL	31.27 mL
5 mM	0.63 mL	3.13 mL	6.25 mL
10 mM	0.31 mL	1.56 mL	3.13 mL
50 mM	0.06 mL	0.31 mL	0.63 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

1. Nakamura A, Uratsuji H, Yamada Y, Hashimoto K, Nozawa N, Matsumoto T. Anti-inflammatory effect of lanoconazole on 12-O-tetradecanoylphorbol-13-acetate- and 2,4,6-trinitrophenyl chloride-induced skin inflammation in mice. *Mycoses*. 2020 Feb;63(2):189-196. doi: 10.1111/myc.13034. Epub 2019 Nov 27. PMID: 31724251; PMCID: PMC7003819.
2. Uratsuji H, Nakamura A, Yamada Y, Hashimoto K, Matsumoto T, Ikeda F, Ishii R. Anti-inflammatory activity of lanoconazole, a topical antifungal agent. *Mycoses*. 2015 Apr;58(4):197-202. doi: 10.1111/myc.12297. Epub 2015 Feb 10. PMID: 25675966.

In vivo study

1. Uratsuji H, Nakamura A, Yamada Y, Hashimoto K, Matsumoto T, Ikeda F, Ishii R. Anti-inflammatory activity of lanoconazole, a topical antifungal agent. *Mycoses*. 2015 Apr;58(4):197-202. doi: 10.1111/myc.12297. Epub 2015 Feb 10. PMID: 25675966.
2. Furukawa K, Sasaki H, Pollard RB, Suzuki F. Lanoconazole, a new imidazole antimycotic compound, protects MAIDS mice against encephalitis caused by *Cryptococcus neoformans*. *J Antimicrob Chemother*. 2000 Sep;46(3):443-50. doi: 10.1093/jac/46.3.443. PMID: 10980172.

7. Bioactivity

Biological target:

Lanoconazole is a potent and orally active imidazole antifungal agent, shows a broad spectrum of activity against fungi in vitro and in vivo.

Product data sheet



In vitro activity

LCZ (Itraconazole) dose-dependently suppressed 12-O-tetradecanoylphorbol-13-acetate-induced irritant dermatitis, suppressed the production of neutrophil chemotactic factors such as keratinocyte-derived chemokine and macrophage inflammatory protein-2, and inhibited neutrophil infiltration to the inflammation site.

Reference: Mycoses. 2020 Feb;63(2):189-196. <https://pubmed.ncbi.nlm.nih.gov/31724251/>

In vivo activity

Whereas Itraconazole inhibited the growth of *C. neoformans* in the brains and lungs of AIDS mice, the pathogen grew in the brains of AIDS mice treated with fluconazole. Itraconazole reduced the number of *C. neoformans* in the brains of normal mice treated with a type 2 cytokine mixture, whereas fluconazole did not.

Reference: J Antimicrob Chemother. 2000 Sep;46(3):443-50. <https://pubmed.ncbi.nlm.nih.gov/10980172/>

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.