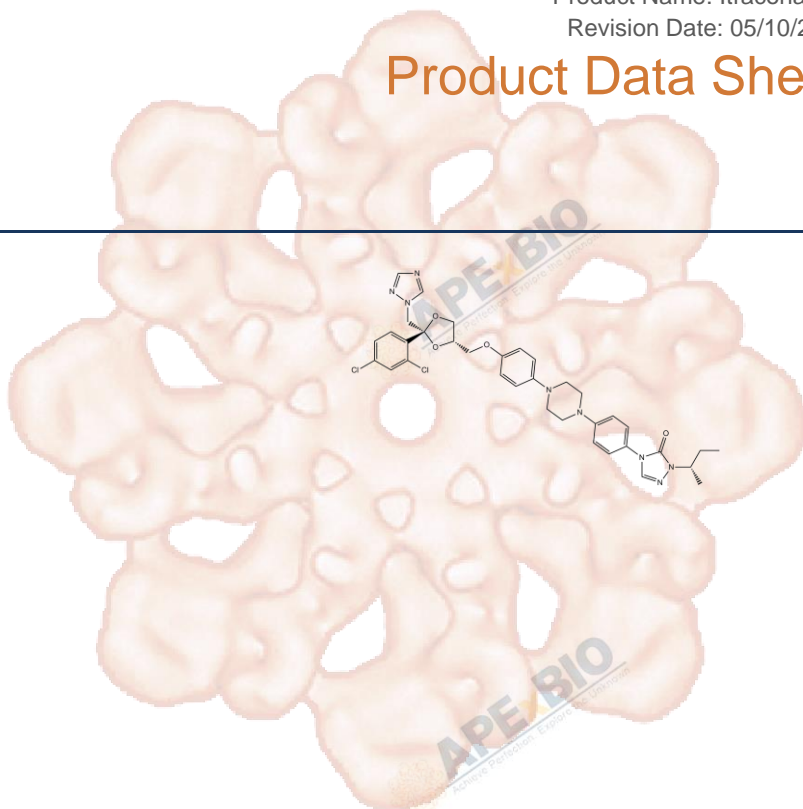


Product Data Sheet

Itraconazole

Cat. No.:	B2104
CAS No.:	84625-61-6
Formula:	C ₃₅ H ₃₈ Cl ₂ N ₈ O ₄
M.Wt:	705.63
Synonyms:	
Target:	Microbiology & Virology
Pathway:	Antibiotic
Storage:	Store at -20°C



Solvent & Solubility

insoluble in EtOH; insoluble in H₂O; ≥8.83 mg/mL in DMSO

In Vitro

Preparing Stock Solutions	Solvent	Mass Concentration	Mass		
			1mg	5mg	10mg
		1 mM	1.4172 mL	7.0859 mL	14.1717 mL
		5 mM	0.2834 mL	1.4172 mL	2.8343 mL
		10 mM	0.1417 mL	0.7086 mL	1.4172 mL

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

Biological Activity

Shortsummary

antifungal agent

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	C. glabrata, C. kefyr
Preparation method:	The solubility of this compound in DMSO is > 8.8mg/mL. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	0.016 µg/ml

	Applications:	Itraconazole showed antifungal activity against 206 isolates of <i>C. glabrata</i> . For 144 isolates, two or more replicate test results were recovered from the database. In five replicate tests with two bioassay strains of <i>C. kefyr</i> (SA and ATCC 46764), the IC50 of itraconazole was 0.016 mg/L.
In Vivo	Animal experiment	
	Animal models:	CD1 mice model of disseminated candidiasis
	Dosage form:	5 mg/kg, twice daily for 5 days
	Applications:	Treatment with ITZ led to lower numbers of CFU per gram of kidney. The survival rates for mice inoculated with strain Sr and isolate B were 7 of 10 in mice treated with ITZ.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

1. Yu Lan, Sha Lu, et al. "Combinatory Effect of ALA - PDT and Itraconazole Treatment for *Trichosporon asahii*." *Lasers Surg Med.* 2020 Nov 8. PMID:33164224

See more customer validations on www.apexbt.com.

References

- [1]. Odds F C, Bossche H V. Antifungal activity of itraconazole compared with hydroxy-itraconazole in vitro[J]. *Journal of Antimicrobial Chemotherapy*, 2000, 45(3): 371-373.
- [2]. Valentin A, Le Guennec R, Rodriguez E, et al. Comparative resistance of *Candida albicans* clinical isolates to fluconazole and itraconazole in vitro and in vivo in a murine model[J]. *Antimicrobial agents and chemotherapy*, 1996, 40(6): 1342-1345.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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