

PRODUCT INFORMATION



Posaconazole

Item No. 14737

CAS Registry No.: 171228-49-2
Formal Name: 2,5-anhydro-1,3,4-trideoxy-2-C-(2,4-difluorophenyl)-4-[[[4-[4-[4-[1-[(1S,2S)-1-ethyl-2-hydroxypropyl]-1,5-dihydro-5-oxo-4H-1,2,4-triazol-4-yl]phenyl]-1-piperazinyl]phenoxy)methyl]-1-(1H-1,2,4-triazol-1-yl)-D-threo-pentitol

Synonyms: POS, SCH 56592

MF: C₃₇H₄₂F₂N₈O₄

FW: 700.8

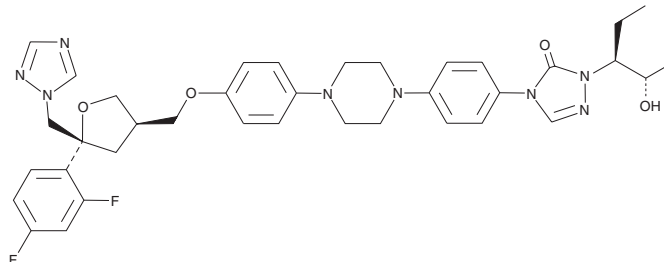
Purity: ≥95%

UV/Vis.: λ_{max}: 263 nm

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Posaconazole is supplied as a crystalline solid. A stock solution may be made by dissolving the posaconazole in the solvent of choice, which should be purged with an inert gas. Posaconazole is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of posaconazole in these solvents is approximately 0.5 mg/ml.

Description

Posaconazole is a broad-spectrum triazole antifungal agent active against various yeasts and molds, including *Aspergillus*, *Candida*, *Fusarium*, and *Zygomycetes*.¹ Posaconazole inhibits the growth of fungi by inhibiting the lanosterol 14 α -demethylase enzyme (IC₅₀s = 7-200 nM), which results in a disruption in the synthesis of ergosterol (Item No. 19850), a key sterol necessary for fungal cell membrane integrity and for the function of certain membrane-bound proteins.²

References

- Herbrecht, R., Nivoix, Y., Fohrer, C., *et al.* Management of systemic fungal infections: Alternatives to itraconazole. *J. Antimicrob. Chemother.* **56(Suppl 1)**, i39-i48 (2005).
- Munayyer, H.K., Mann, P.A., Chau, A.S., *et al.* Posaconazole is a potent inhibitor of sterol 14 α -demethylation in yeasts and molds. *Antimicrob. Agents Chemother.* **48(10)**, 3690-3696 (2004).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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