

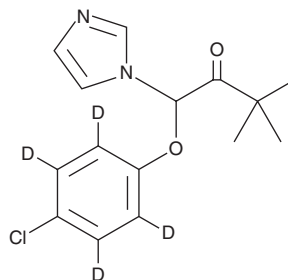
PRODUCT INFORMATION



(±)-Climbazole-d₄

Item No. 27616

CAS Registry No.: 1185117-79-6
Formal Name: 1-(4-chlorophenoxy-2,3,5,6-d₄)-1-(1H-imidazol-1-yl)-3,3-dimethylbutan-2-one
MF: C₁₅H₁₃ClD₄N₂O₂
FW: 296.8
Chemical Purity: ≥98% (Climbazole)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₄); ≤1% d₀
Supplied as: A 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

(±)-Climbazole-d₄ is intended for use as an internal standard for the quantification of climbazole by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

(±)-Climbazole-d₄ is supplied as a solid, which should be purged with an inert gas. A stock solution may be made by dissolving the (±)-climbazole-d₄ in the solvent of choice, which should be purged with an inert gas. (±)-Climbazole-d₄ is soluble in the organic solvent chloroform. (±)-Climbazole-d₄ is also sparingly soluble in methanol.

Description

Climbazole is an imidazole antifungal.¹ It inhibits the growth of *C. albicans* (MIC = 0.29 µg/ml) and various strains of *M. pachydermatis* (MICs = <0.06-1 µg/ml).^{2,3} (±)-Climbazole (80 mg/kg) increases the levels of cytochrome P450 in rat liver.⁴ Formulations containing climbazole have been used in the treatment of dandruff.

References

1. Paz-Alvarez, M., Pudney, P.D.A., Hadgraft, J., *et al.* Topical delivery of climbazole to mammalian skin. *Int. J. Pharm.* **549(1-2)**, 317-324 (2018).
2. Stylianou, M., Kuleskiy, E., Lopes, J.P., *et al.* Antifungal application of nonantifungal drugs. *Antimicrob. Agents Chemother.* **58(2)**, 1055-1062 (2014).
3. Schmidt, A. *In vitro* activity of climbazole, clotrimazole and silver-sulphadiazine against isolates of *Malassezia pachydermatis*. *Zentralbl Veterinarmed B* **44(4)**, 193-197 (1997).
4. Kobayashi, Y., Suzuki, M., Ohshiro, N., *et al.* Climbazole is a new potent inducer of rat hepatic cytochrome P450. *J. Toxicol. Sci.* **26(3)**, 141-150 (2001).

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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