

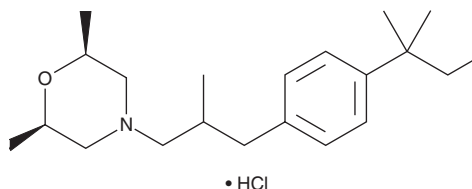
PRODUCT INFORMATION



Amorolfine (hydrochloride)

Item No. 26077

CAS Registry No.: 78613-38-4
Formal Name: (2R,6S)-rel-4-[3-[4-(1,1-dimethylpropyl)phenyl]-2-methylpropyl]-2,6-dimethylmorpholine, monohydrochloride
Synonym: Ro 14-4767/002
MF: C₂₁H₃₅NO • HCl
FW: 354.0
Purity: ≥98%
UV/Vis.: λ_{max}: 213, 219, 279, 318 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

Amorolfine (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the amorolfine (hydrochloride) in the solvent of choice. Amorolfine (hydrochloride) is soluble in the organic solvent ethanol, which should be purged with an inert gas, at a concentration of approximately 20 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of amorolfine (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of amorolfine (hydrochloride) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Amorolfine is an antifungal.¹ It is active against isolates of *T. rubrum*, *T. mentagrophytes*, and *C. albicans* (MIC₉₀s = 4-15, 4-60, and ≤30-500 ng/ml, respectively). It inhibits the growth of *T. mentagrophytes* and *T. rubrum* by 33.7 and 38.5%, respectively, in an *in vitro* bovine hoof model of onychomycosis.² Amorolfine also decreases the fungal burden in a rabbit model of onychomycosis when used as a 5% nail lacquer.³ Formulations containing amorolfine have been used in the treatment of fungal infections of the toe- or fingernails.

References

1. Jo Siu, W.J., Tatsumi, Y., Senda, H., *et al.* Comparison of *in vitro* antifungal activities of efinaconazole and currently available antifungal agents against a variety of pathogenic fungi associated with onychomycosis. *Antimicrob. Agents Chemother.* **57(4)**, 1610-1616 (2013).
2. Slevin, R., Lanckacker, E., Boulet, G., *et al.* Development of a novel *in vitro* onychomycosis model for the evaluation of topical antifungal activity. *J. Microbiol. Methods* **112**, 73-75 (2015).
3. Shimamura, T., Kubota, N., Nagasaka, S., *et al.* Establishment of a novel model of onychomycosis in rabbits for evaluation of antifungal agents. *Antimicrob. Agents Chemother.* **55(7)**, 3150-3155 (2011).

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.

WARRANTY AND LIMITATION OF REMEDY

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