PRODUCT INFORMATION

Terbinafine (hydrochloride)
Item No. 10011619

CAS Registry No.: 78628-80-5
Formal Name: N-[(2E)-6,6-dimethyl-2-hepten-4-yn-1-yl]-N-methyl-1-naphthalenemethanamine, monohydrochloride
MF: C_{21}H_{25}N • HCl
FW: 327.9
Purity: ≥98%
UV/Vis.: λ_{max} 223, 284 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years

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

Laboratory Procedures

Terbinafine (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the terbinafine (hydrochloride) in the solvent of choice. Terbinafine (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of terbinafine (hydrochloride) in ethanol is approximately 30 mg/ml and approximately 10 mg/ml in DMSO and DMF.

Terbinafine (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, terbinafine (hydrochloride) should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Terbinafine (hydrochloride) has a solubility of approximately 0.3 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Terbinafine is an antifungal compound that is highly active against dermatophytes, mold, other basic fungi, and some strains of yeast.\textsuperscript{1} It is clinically used to treat nail and skin infections, inhibiting ergosterol synthesis at the stage of squalene epoxidation (IC\textsubscript{50} = 30 nM for C. albicans).\textsuperscript{2} At 90-120 µM, terbinafine exhibits antitumor and anti-angiogenic activity by inducing cell cycle arrest at the G\textsubscript{0}/G\textsubscript{1} stage in COLO 205 tumor cells and human vascular endothelial cells.\textsuperscript{3,4}

References