

Naftifine (hydrochloride)

Catalog No: tcsc2730



Available Sizes

Size: 1g

Size: 5g



Specifications

CAS No:

65473-14-5

Formula:

$C_{21}H_{22}ClN$

Pathway:

Anti-infection

Target:

Fungal

Purity / Grade:

>98%

Solubility:

Ethanol : 42.5 mg/mL (131.23 mM; Need ultrasonic)

Observed Molecular Weight:

323.86

Product Description

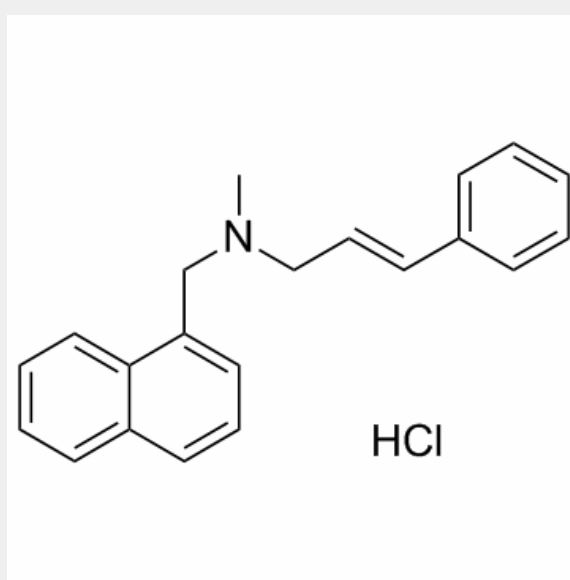
Naftifine Hydrochloride is a synthetic, broad spectrum, antifungal agent.

Target: Antifungal

Naftifine exhibits an interesting in vitro spectrum of activity against dermatophytes (38 strains; minimal inhibitory concentration (MIC) range 0.1 to 0.2 mg/mL), aspergilli (6 strains; MIC range, 0.8 to 12.5 mg/mL), *Sporothrix schenckii* (2 strains; MICs, 0.8 and 1.5

mg/mL), and yeasts of the genus *Candida* (77 strains; MIC range, 1.5 to greater than 100 mg/mL) [1]. The MIC of naftifine for *C. albicans* Δ63 is 100 mg/L in Sabouraud medium (initial pH 6.5). Naftifine (50 mg/L) gives greater than 99% inhibition of sterol biosynthesis both in whole cells and in cell extracts of *C. albicans*. The primary action of naftifine appears to be the blocking of fungal squalene epoxidation [2].

Naftifine HCl 2% cream results in clinical cure rate and clinical success rate of 33% and 84% after treatment for 4 weeks, and week 2 efficacy response rates in Naftifine HCl 2% subjects are all lower than at week 4 but are significantly higher than week 2 vehicle-treated counterparts [3]. Naftifine causes interruption of fungal ergosterol synthesis and accumulation of squalene in fungal organisms. Naftifine also has demonstrated anti-inflammatory properties such as a reduction in superoxide production and a reduction in polymorphonuclear leukocyte chemotaxis/endothelial adhesion. Naftifine has shown good efficacy and safety for a variety of conditions and is a useful treatment that provides both antifungal action and relief of inflammatory signs and symptoms. Few adverse events have been noted with naftifine use, the most frequent being mild and transient burning, stinging, or itching in the application area [4].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!