

Ciclopirox

Catalog No: tcsc2561



Available Sizes

Size: 50mg

Size: 100mg



Specifications

CAS No:

29342-05-0

Formula:

$C_{12}H_{17}NO_2$

Pathway:

Anti-infection;Autophagy

Target:

Fungal;Autophagy

Purity / Grade:

>98%

Solubility:

DMSO : 100 mg/mL (482.46 mM; Need ultrasonic)

Alternative Names:

HOE296b

Observed Molecular Weight:

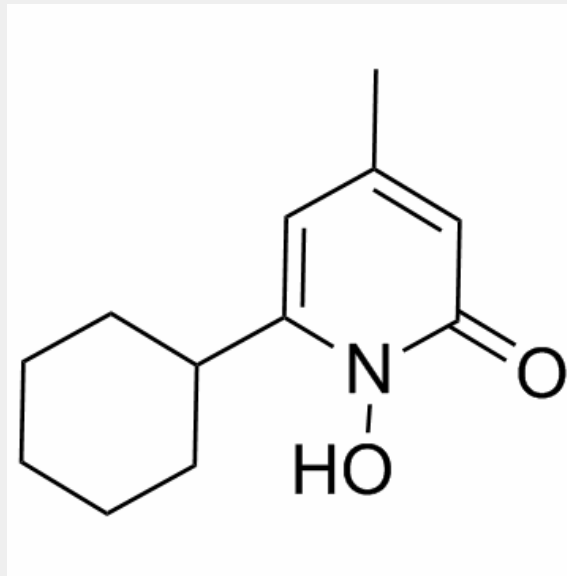
207.27

Product Description

Ciclopirox (Penlac) is a synthetic antifungal agent.

Target: Antifungal

Ciclopirox is a synthetic antifungal agent for topical dermatologic treatment of superficial mycoses. It is most useful against *Tinea versicolor*. The mechanism of action of ciclopirox is poorly understood [1]. However, loss of function of certain catalase and peroxidase enzymes has been implicated as the mechanism of action, as well as various other components of cellular metabolism. In a study conducted to further elucidate ciclopirox's mechanism, several *Saccharomyces cerevisiae* mutants were screened and tested. Results from interpretation of the effects of both the drug treatment and mutation suggested that ciclopirox may exert its effect by disrupting DNA repair, cell division signals and structures (mitotic spindles) as well as some elements of intracellular transport [2]. It acts by inhibiting the membrane transfer system by interrupting the Na⁺ K⁺ ATPase [1]. It is currently being investigated as an alternative treatment to ketoconazole for seborrheic dermatitis as it suppresses growth of the yeast *Malassezia furfur*. Initial results show similar efficacy to ketoconazole with a relative increase in subjective symptom relief due to its inherent anti-inflammatory properties [3].



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