

Product Name : Efinaconazole

Synonyms : KP103; KP-103; CTK5J2975; AGJ95634; Efinaconazole

Cat No. : M17358

**CAS Number** : 164650-44-6

Molecular Formula : C18H22F2N4O

Formula Weight : 348.34

Description

Chemical Name : (2R,3R)-2-(2,4-difluorophenyl)-3-(4-methylenepiperidin-1-yl)-1-(1H-1,2,4-triazol-1-yl)butan-2-ol

Efinaconazole is a triazole antifungal. It is approved for use in Canada and the USA as a 10% topical solution for the treatment of onychomycosis (fungal infection of the nail). Efinaconazole acts as a 14 $\alpha$ -demethylase inhibitor. Efinaconazole inhibits fungal lanosterol 14 $\alpha$ -demethylase involved in the biosynthesis of ergosterol, a constituent of fungal cell membranes.

Efinaconazole has been shown to be active against isolates of the following microorganisms, both in vitro and in clinical infections. Efinaconazole exhibits in vitro minimum inhibitory concentrations (MICs) of 0.06 µg/mL or less against most (≥

90%) isolates of the following microorganisms: Trichophyton rubrum; Trichophyton mentagrophytes.

Pathway : Angiogenesis

Target : PDGFR

Receptor : Antifungle

**Solubility** : DMSO : ≥ 100 mg/mL;287.03 mM

**SMILES** : C=C1CCN(CC1)[C@@H]([C@@](c1ccc(cc1F)F)(Cn1cncn1)O)C

**Storage** : (-20°C)

Stability : ≥ 2 years

Reference :

1. Tatsumi Y, et al. Antimicrob Agents ChemOthers. 2013 May; 57(5):2405-9.