

Ketoconazole, Cytochrome P450 inhibitor

Catalog	Unit
TBI1015-100MG	100 mg
TBI1015-500MG	500 mg

Product Details

Formal Name: (\pm)-1-[4-(4-{{-2-(2,4-Dichlorophenyl)-2-(1H-imidazol-1-ylmethyl)-1,3-dioxolan-4-yl}methoxy}phenyl)piperazin-1-yl]ethan-1-one

Molecular Formula: C₂₆H₂₈Cl₂N₄O₄

Formula Weight: 531.43

CAS Number: 65277-42-1

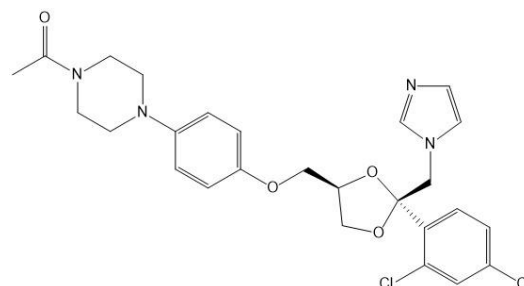
Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (up to 25 mg/ml) or in Ethanol (up to 20 mg/ml).

Storage: RT

Stability: \geq 2 years.



Applications

Cytochrome P450 inhibitor

Functions

Ketoconazole is a broad spectrum antifungal agent which acts via inhibition of a cytochrome P450, CYP51A1 which is a lanosterol 14 α -demethylase. Also inhibits CYP3A and CYP1A1. Inhibits adrenal steroidogenesis. Downregulates cholesterol synthesis in drug-tolerant human lung cancer cell lines. Blocks the biosynthesis of leukotrienes (LT) via inhibition of 5-lipoxygenase and dose dependently inhibits LT-mediated bronchoconstriction in guinea pigs.

Application Procedures

First dissolved in DMSO (up to 25 mg/ml) or in Ethanol (up to 20 mg/ml), then diluted to aqueous buffer. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

For research use only.