Tribioscience

Itraconazole, Autophagy inducer; Inhibits glioblastoma growth

Unit 50 mg 250 mg

Catalog	
TBI2033-50MG	
TBI2033-250MG	

Product Details

Alternate Names: Oriconazole; R51211 Molecular Formula: $C_{35}H_{38}Cl_2N_8O_4$ Formula Weight: 705.60 CAS Number: 84625-61-6 Purity: >98% Formulation: powder Solubility: Soluble in DMSO (up to 1.5 mg/ml with warming) Storage: -20°C Stability: \geq 1 year.

Applications

Autophagy inducer; Inhibits glioblastoma growth

Functions

Itraconazole inhibits the conversion of lanosterol to ergosterol via inhibition of the 14- α demethylase, a cytochrome P-450 enzyme. Clinically useful antifungal agent. It inhibits the proliferation of glioblastoma cells in vitro and in vivo by inducing autophagic progression via inhibiting the trafficking of cholesterol from late endosomes and lysosomes to the plasma membrane. Inhibits the hedgehog pathway by binding to Smoothened (SMO) via a mechanism distinct from that of cyclopamine. Inhibits angiogenesis via inhibiting the binding of VEGF to VEGFR2.

Application Procedures

First dissolved in DMSO (up to 1.5 mg/ml with warming), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20° C for up to 1 month.

For research use only.