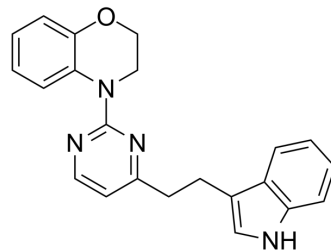


CYP121A1-IN-1

Cat. No.:	HY-144325
Molecular Formula:	C ₂₂ H ₂₀ N ₄ O
Molecular Weight:	356.42
Target:	Cytochrome P450
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	CYP121A1-IN-1 is a potent CYP121A1 inhibitor with favorable activity against Mycobacterium tuberculosis (H37Rv MIC ₉₀ -6.25 μM, -2.2 μg/mL). CYP121A1-IN-1 can markedly reduce the production of mycocyclosin via inhibiting the CYP121A1 mediated turnover of cyclo(l-tyrosyl-l-tyrosyl) to mycocyclosin ^[1] .
IC ₅₀ & Target	MIC ₉₀ : 6.25 μM, 2.2 μg/mL (H37Rv) ^[1]
In Vitro	CYP121A1-IN-1 (compound 61) (0.78-400 μM; one week for c7H9 and 7H9-Low BSA media or two weeks for MMM-Ch medium) has favorable activity against Mtb strain H37Rv (MIC ₉₀ -6.25 μM, -2.2 μg/mL) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Frederickson M, et al. A new strategy for hit generation: Novel in cellulo active inhibitors of CYP121A1 from Mycobacterium tuberculosis via a combined X-ray crystallographic and phenotypic screening approach (XP screen). Eur J Med Chem. 2022;230:114105.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA