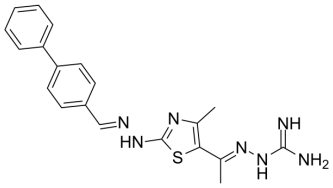
GlcN-6-P Synthase-IN-1

Cat. No.:	HY-147999
CAS No.:	2447602-44-8
Molecular Formula:	$C_{20}H_{21}N_7S$
Molecular Weight:	391.49
Target:	Bacterial; Fungal; Cytochrome P450
Pathway:	Anti-infection; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	GlcN-6-P Synthase-IN-1 (Compound 4d) is a Glucosamine-6-phosphate (GlcN-6-P) synthase inhibitor with an IC_{50} of 3.47 μM. GlcN-6-P Synthase-IN-1 exhibits significant antimicrobial activity. GlcN-6-P Synthase-IN-1 has good penetration in the CNS and is able to inhibit the cytochrome P450, CYP3A4 isoform[1].
IC_{50} & Target	IC_{50}: 3.47 μM (GlcN-6-P synthase)[1]
In Vitro	GlcN-6-P Synthase-IN-1 (Compound 4d) shows antimicrobial activity with MIC values of 1 ± 0.15, 0.5 ± 0.15, 4 ± 0.33 and 4 ± 0.33 μg/mL against S. aureus, B. subtilis, C. albicans and A. oryzae, respectively[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Omar AM, et al. The rational design, synthesis, and antimicrobial investigation of 2-Amino-4-Methylthiazole analogues inhibitors of GlcN-6-P synthase. Bioorg Chem. 2020 Jun;99:103781.

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