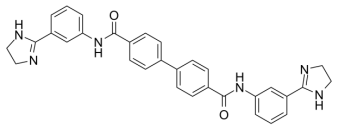
BPH-1358 free base

Cat. No.:	HY-118946A
CAS No.:	801985-13-7
Molecular Formula:	$C_{32}H_{28}N_6O_2$
Molecular Weight:	528.6
Target:	Bacterial
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	BPH-1358 free base (NSC50460 free base) is a potent human farnesyl diphosphate synthase (FPPS) and undecaprenyl diphosphate synthase (UPPS) inhibitor with IC_{50}s of 1.8 μM and 110 nM, respectively, and is active against ***S. aureus*** in vitro (MIC ~250 ng/mL)[1][2].
IC_{50} & Target	IC50: 1.8 μM (human bisphosphonate farnesyl diphosphate synthase)[1]; 100 nM (undecaprenyl diphosphate synthase)[2]
In Vitro	BPH-1358 is the most potent inhibitor of both E. coli UPPS (EcUPPS) as well as S. aureus UPPS (SaUPPS) with an IC_{50} of 110 nM. BPH-1358 against E. coli and S. aureus with EC_{50} of 300 nM and 290 nM, respectively[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	BPH-1358 is active against S. aureus in vivo (20/20 mice survived in an i.p. infection model with a MRSA strain)[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Liu YL, et al. Farnesyl diphosphate synthase inhibitors with unique ligand-binding geometries. ACS Med Chem Lett. 2015 Jan 29;6(3):349-54.

[2]. Zhu W, et al. Antibacterial drug leads: DNA and enzyme multitargeting. J Med Chem. 2015 Feb 12;58(3):1215-27.

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