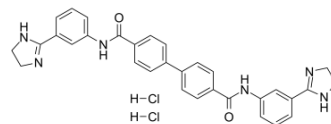


BPH-1358

Cat. No.:	HY-118946
CAS No.:	5352-53-4
Molecular Formula:	C ₃₂ H ₃₀ Cl ₂ N ₆ O ₂
Molecular Weight:	601.53
Target:	Bacterial
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the COA.



BIOLOGICAL ACTIVITY

Description	BPH-1358 (NSC50460) 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 <i>S. aureus</i> in vitro (MIC ~250 ng/mL) ^{[1][2]} .
IC ₅₀ & Target	IC ₅₀ : 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 <i>E. coli</i> UPPS (EcUPPS) as well as <i>S. aureus</i> UPPS (SaUPPS) with an IC ₅₀ of 110 nM. BPH-1358 against <i>E. coli</i> and <i>S. aureus</i> with EC ₅₀ of 300 nM and 290 nM, respectively ^[1] .
In Vivo	BPH-1358 is active against <i>S. aureus</i> in vivo (20/20 mice survived in an i.p. infection model with a MRSA strain) ^[1] .

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.

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

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