

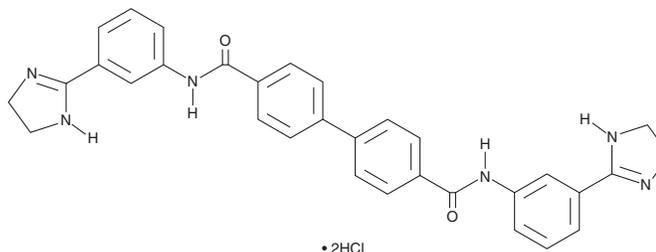
PRODUCT INFORMATION



BPH-1358

Item No. 37402

CAS Registry No.: 5352-53-4
Formal Name: N⁴,N^{4'}-bis[3-(4,5-dihydro-1H-imidazol-2-yl)phenyl]-[1,1'-biphenyl]-4,4'-dicarboxamide
Synonym: NSC 50460
MF: C₃₂H₂₈N₆O₂ • 2HCl
FW: 601.5
Purity: ≥95%
UV/Vis.: λ_{max}: 221, 298 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

BPH-1358 is supplied as a solid. A stock solution may be made by dissolving the BPH-1358 in the solvent of choice, which should be purged with an inert gas. BPH-1358 is soluble in the organic solvent DMSO (sonicated) at a concentration of approximately 1 mg/ml.

Description

BPH-1358 is an inhibitor of undecaprenyl diphosphate synthase (UPPS; IC₅₀ = 0.11 μM for the *E. coli* and *S. aureus* enzymes), an enzyme involved in bacterial cell wall biosynthesis.¹ It is also an inhibitor of farnesyl diphosphate synthase (FPPS; IC₅₀ = 1.8 μM for the human enzyme), an enzyme in the mevalonate pathway of cholesterol and isoprenoid biosynthesis.² BPH-1358 is active against *E. coli* and *S. aureus* (EC₅₀s = 0.3 and 0.29 nM, respectively) and increases survival in a mouse model of *S. aureus* infection when administered at a dose of 10 mg/kg.¹

References

1. Zhu, W., Wang, Y., Li, K., *et al.* Antibacterial drug leads: DNA and enzyme multitargeting. *J. Med. Chem.* **58**(3), 1215-1227 (2015).
2. Lindert, S., Zhu, W., Liu, Y.-L., *et al.* Farnesyl diphosphate synthase inhibitors from *in silico* screening. *Chem. Biol. Drug Des.* **81**(6), 742-748 (2013).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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