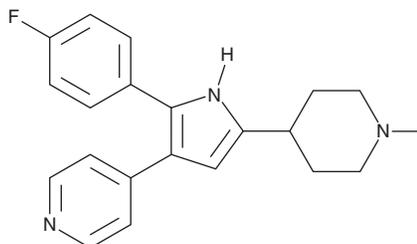


PRODUCT INFORMATION



MBP146-78
Item No. 41083

CAS Registry No.: 188343-77-3
Formal Name: 4-[2-(4-fluorophenyl)-5-(1-methyl-4-piperidinyl)-1H-pyrrol-3-yl]-pyridine
MF: C₂₁H₂₂FN₃
FW: 335.4
Purity: ≥98%
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

MBP146-78 is supplied as a solid. A stock solution may be made by dissolving the MBP146-78 in the solvent of choice, which should be purged with an inert gas. MBP146-78 is slightly soluble (0.1-1 mg/ml) in ethanol and DMSO.

Description

MBP146-78 is an inhibitor of parasitic cGMP-dependent protein kinases (PKGs; IC₅₀s = 1.9 and 1 nM for the *E. tenella* and *T. gondii* enzymes, respectively).¹ It inhibits *P. berghei* sporozoite development into liver-stage parasites in HepG2 cells in a concentration-dependent manner.² MBP146-78 (50 mg/kg) prevents *P. yoelii* liver infection in *P. yoelii*-infected mice. It increases survival time in *P. berghei*-infected mice when administered at a dose of 50 mg/kg twice per day for eight days.¹ MBP146-78 (50 mg/kg two times per day) increases survival in *T. gondii*-infected mice and prevents secondary reinfection in the same mice.³

References

1. Diaz, C.A., Allocco, J., Powles, M.A., *et al.* Characterization of Plasmodium falciparum cGMP-dependent protein kinase (PfPKG): Antiparasitic activity of a PKG inhibitor. *Mol. Biochem. Parasitol.* **146(1)**, 78-88 (2006).
2. Panchal, D. and Bhanot, P. Activity of a trisubstituted pyrrole in inhibiting sporozoite invasion and blocking malaria infection. *Antimicrob. Agents Chemother.* **54(10)**, 4269-4274 (2010).
3. Nare, B., Allocco, J.J., Liberator, P.A., *et al.* Evaluation of a cyclic GMP-dependent protein kinase inhibitor in treatment of murine toxoplasmosis: Gamma interferon is required for efficacy. *Antimicrob. Agents Chemother.* **46(2)**, 300-307 (2002).

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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