

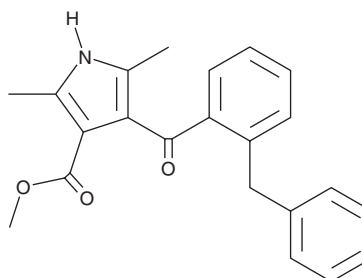
PRODUCT INFORMATION



FPL 64176

Item No. 20122

CAS Registry No.: 120934-96-5
Formal Name: 2,5-dimethyl-4-[2-(phenylmethyl)benzoyl]-1H-pyrrole-3-carboxylic acid, methyl ester
MF: C₂₂H₂₁NO₃
FW: 347.4
Purity: ≥98%
UV/Vis.: λ_{max}: 294 nm
Supplied as: A crystalline 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

FPL 64176 is supplied as a crystalline solid. A stock solution may be made by dissolving the FPL 64176 in the solvent of choice, which should be purged with an inert gas. FPL 64176 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of FPL 64176 in these solvents is approximately 2, 25, and 20 mg/ml, respectively.

FPL 64176 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, FPL 64176 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. FPL 64176 has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

FPL 64176 is a nondihydropyridine that activates L-type Ca²⁺ channels with an EC₅₀ value of 16 nM.^{1,2} It prolongs action potential duration and increases contractility in guinea pig atria preparations with an EC₅₀ value of 49 nM.^{2,3}

References

1. Zheng, W., Rampe, D., and Triggle, D. J. Pharmacological, radioligand binding, and electrophysiological characteristics of FPL 64176, a novel nondihydropyridine Ca²⁺ channel activator, in cardiac and vascular preparations. *Mol. Pharm.* **40**, 734-741 (1991).
2. Baxter, A. J. G., Dixon, J., Ince, F., et al. Discovery and synthesis of methyl 2,5-dimethyl-4-[2-(phenylmethyl)benzoyl]-1H-pyrrole-3-carboxylate (FPL 64176) and analogues: The first examples of a new class of calcium channel activator. *J. Med. Chem.* **36**, 2739-2744 (1993).
3. Rampe, D., Anderson, B., Rapien-Pryor, V., et al. Comparison of the *in vitro* and *in vivo* cardiovascular effects of two structurally distinct Ca⁺⁺ channel activators, BAY K 8644 and FPL 64176. *J. Pharm. Exp. Ther.* **265**(3), 1125-1130 (1993).

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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