

Product Name: FPL 64176

Catalog No.: 1403

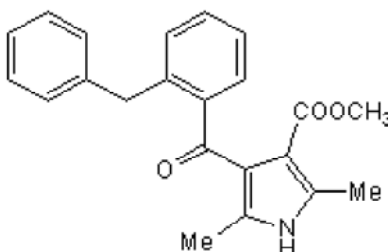
Batch No.: 2

CAS Number: 120934-96-5

IUPAC Name: 2,5-Dimethyl-4-[2-(phenylmethyl)benzoyl]-1*H*-pyrrole-3-carboxylic acid methyl ester

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₂H₂₁NO₃
Batch Molecular Weight: 347.41
Physical Appearance: White solid
Solubility: ethanol to 25 mM
 DMSO to 50 mM
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.6 (Dichloromethane:Methanol [96:4])
Melting Point: At 154°C
HPLC: Shows 99.2% purity
¹H NMR: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	76.06	6.09	4.03
Found	76.15	6.15	4.02

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

Potent activator of L-type Ca²⁺ channels (EC₅₀ = 16 nM). 40-fold more potent than Bay K 8644 (Cat. No. 1544) as a positive inotrope in guinea pig atria.

Physical and Chemical Properties:

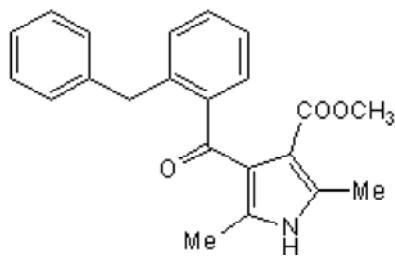
Batch Molecular Formula: C₂₂H₂₁NO₃

Batch Molecular Weight: 347.41

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

ethanol to 25 mM

DMSO to 50 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

Other Information:

INFORMATION FOR CUSTOMERS IN THE UK ONLY

This product is a Schedule 1 Home Office controlled substance and customers in the UK are required to hold the relevant licence or be exempt from restrictions in order to purchase and possess this material.

References:

Baxter et al (1993) 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. PMID: 7692047.

Rampe et al (1993) Comparison of the *in vitro* and *in vivo* cardiovascular effects of two structurally distinct Ca⁺⁺ channel activators, BAY K 8644 and FPL 64176. *J.Pharmacol.Exp.Ther.* **265** 1125. PMID: 7685384.

Zheng et al (1991) Pharmacological, radioligand binding, and electrophysiological characteristics of FPL 64176, a novel nondihydropyridine Ca²⁺ channel activator, in cardiac and vascular preparations. *Mol.Pharmacol.* **40** 734. PMID: 1719369.

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