MCE MedChemExpress

Product Data Sheet

FPL64176

Cat. No.: HY-103307

CAS No.: 120934-96-5

Molecular Formula: C₂₂H₂₁NO₃

Molecular Weight: 347.41

Target: Calcium Channel

Pathway: Membrane Transporter/Ion Channel; Neuronal Signaling

Storage: 4°C, sealed storage, away from moisture and light

* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture

and light)

SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (287.84 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.8784 mL	14.3922 mL	28.7844 mL
	5 mM	0.5757 mL	2.8784 mL	5.7569 mL
	10 mM	0.2878 mL	1.4392 mL	2.8784 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (7.20 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (7.20 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (7.20 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

FPL64176, a nondihydropyridine compound, is a potent agonist of L-type Ca^{2+} channels with an EC_{50} value of 16 nM^{[1][2]}.

REFERENCES

[1]. Zheng W, Rampe D, Triggle DJ. Pharmacological, radioligand binding, and electrophysiological characteristics of FPL 64176, a novel nondihydropyridine Ca2+ channel activator, in cardiac and vascular preparations. Mol Pharmacol. 1991 Nov;40(5):734-41.

			5-dimethyl-4-[2- (phenylmethyl)benzoyl]	-1H-pyrrole-3-carboxylate (FPL 64176)
and analogues: the first examp	oles of a new class of calciu	ım channel activator. J Med Chem		
			nedical applications. For research us	
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