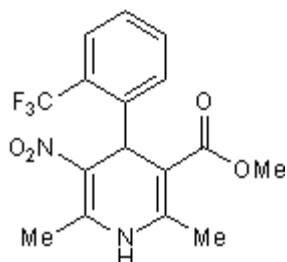


(±)-Bay K 8644

Cat. No. 1544



Chemical Name: 1,4-Dihydro-2,6-dimethyl-5-nitro-4-[2-(trifluoromethyl)phenyl]-3-pyridinecarboxylic acid, methyl ester

Biological Activity

L-type Ca²⁺-channel activator (EC₅₀ = 17.3 nM). Has positive inotropic, vasoconstrictive and behavioral effects *in vivo*. Separate enantiomers [\(R\)-\(+\)-Bay K 8644](#) and [\(S\)-\(-\)-Bay K 8644](#) also available (Cat. Nos. 1545 and 1546 respectively). In combination with [BIX-01294](#) (Cat. No. 3364), helps generate induced pluripotent stem cells (iPSCs) from mouse embryonic fibroblasts (MEFs). Inhibits autophagy.

Technical Data

M.Wt:

356.3

Formula:

C₁₆H₁₅F₃N₂O₄

Solubility:

Soluble to 100 mM in ethanol

Purity:

>99 %

Storage:

Store at +4°C

CAS No:

71145-03-4

Phone: (800) 343-7475 (612) 379-2956

Fax: (612) 656-4400

Email: customerservice@rndsystems.com

The technical data provided above is for guidance only.
For batch specific data refer to the Certificate of Analysis.

References

Greenberg *et al* (1984) Calcium channel 'agonist' BAY K 8644 inhibits calcium antagonist binding to brain and PC12 cell membranes. *Brain Res.* **305** 365. PMID: [6204725](#).

Bourson *et al* (1989) Central and peripheral effects of the dihydropyridine calcium channel activator BAY K 8644 in the rat. *Eur.J.Pharmacol.* **160** 339. PMID: [2469593](#).

Shi *et al* (2008) Induction of pluripotent stem cells from mouse embryonic fibroblasts by Oct4 and Klf4 with small-molecule compounds. *Cell Stem Cell* **3** 568. PMID: [18983970](#).

Sarkar *et al* (2009) Rapamycin and mTOR-independent autophagy inducers ameliorate toxicity of polyglutamine-expanded huntingtin and related proteinopathies. *Cell Death Differ.* **16** 46. PMID: [18636076](#).

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