



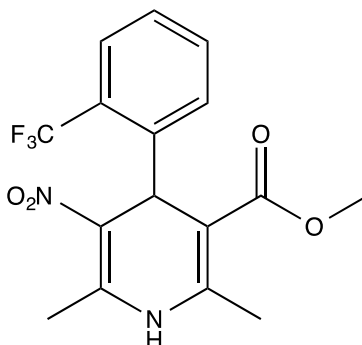
Catalog # 10-4518

(±)-Bay K8644

CAS# 71145-03-4

(±)- Methyl 1,4-Dihydro-2,6-dimethyl-5-nitro-4-[2-(trifluoromethyl)phenyl]-3-pyridinecarboxylate

Lot # FBA1098



Bay K8644 is an L-type Ca²⁺-channel activator with positive inotropic and vasoconstrictive effects.^{1,2,3} Bay K8644, in combination with the histone methyltransferase inhibitor BIX-01294 (Cat. #10-1335) has been shown to induce pluripotent stem cells from fibroblasts using only *Oct4* and *Klf4* transduction.⁴

- 1) Schramm et al. (1983) *Novel Dihydropyridines with positive inotropic action through activation of Ca²⁺ channels. Nature* **303** 535
- 2) Yamamoto et al. (1984) Bay K8644 Differentiates between potential and receptor operated Ca²⁺ channels. *Eur. J. Pharmacol.* **102** 555
- 3) Thomas et al. (1985) A dihydropyridine (Bay K 8644) that enhances calcium currents in guinea pig and calf myocardial cells. A new type of positive inotropic agent. *Circ. Res.* **56** 87
- 4) Shi et al. (2009) Induction of pluripotent stem cells from mouse embryonic fibroblasts by *Oct4* and *Klf4* with small molecule compounds. *Cell Stem Cell* **3** 568

PHYSICAL DATA

Molecular Weight:	356.30
Molecular Formula:	C ₁₆ H ₁₅ F ₃ N ₂ O ₄
Purity:	>98% (TLC: 5% Methanol/methylene chloride + 0.5% NH ₄ OH; R _f = 0.55)
Solubility:	DMSO (at least 25 mg/ml) or ethanol (at least 25 mg/ml)
Physical Description:	Yellow solid
Storage and Stability:	Store as supplied at -20° for up to one year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.