

**Product Name:** (S)-(-)-Bay K 8644

**Catalog No.:** 1546

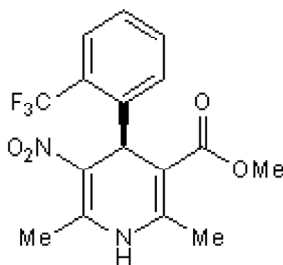
**Batch No.:** 8

CAS Number: 98625-26-4

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

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>16</sub>H<sub>15</sub>F<sub>3</sub>N<sub>2</sub>O<sub>4</sub>.  
**Batch Molecular Weight:** 356.3  
**Physical Appearance:** Yellow solid  
**Solubility:** DMSO to 100 mM  
 ethanol to 100 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 99.6% purity  
**Chiral HPLC:** Shows 99.8% purity  
<sup>1</sup>H NMR: Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Optical Rotation:** [α]<sub>D</sub> = -43.2 (Concentration = 0.4, Solvent = Dioxane)  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	53.94	4.24	7.86
Found	54.09	4.27	7.91

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

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**Description:**

(S)-(-)-Bay K 8644 is a L-type Ca<sup>2+</sup>-channel activator with positive inotropic, vasoconstrictive and behavioral effects in vivo. Racemate and (R)-(+)-Enantiomer also available.

**Physical and Chemical Properties:**

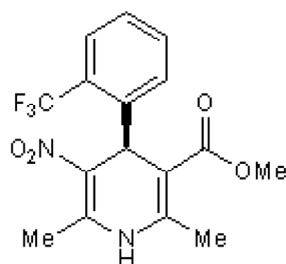
Batch Molecular Formula: C<sub>16</sub>H<sub>15</sub>F<sub>3</sub>N<sub>2</sub>O<sub>4</sub>.

Batch Molecular Weight: 356.3

Physical Appearance: Yellow solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**Storage:** Store at +4°C

**Solubility & Usage Info:**

DMSO to 100 mM  
ethanol to 100 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. \*Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

**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.

**References:**

**Ravens and Schopper** (1990) Opposite cardiac actions of the enantiomers of Bay K 8644 at different membrane potentials in guinea-pig papillary muscles. *Naunyn Schmiedebergs Arch.Pharmacol.* **341** 232. PMID: 1692975.

**O'Neill and Bolger** (1988) Enantiomer selectivity and the development of tolerance to the behavioral effects of the calcium channel activator BAY K 8644. *Brain Res.Bull.* **21** 865. PMID: 2465070.

**Franckowiak et al** (1985) The optical isomers of the 1,4-dihydropyridine BAY K 8644 show opposite effects on Ca channels. *Eur.J.Pharmacol.* **114** 223. PMID: 2412855.

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