

# Bay-K-8644 ( (R) - (+) -)

Catalog No: tcsc3614



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg



## Specifications

**CAS No:**

98791-67-4

**Formula:**

$C_{16}H_{15}F_3N_2O_4$

**Pathway:**

Membrane Transporter/Ion Channel

**Target:**

Calcium Channel

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 300$  mg/mL (841.99 mM)

**Alternative Names:**

(R)-(+)-Bay-K-8644;R-4407;NI-105;(+) -BAY-K-8644

**Observed Molecular Weight:**

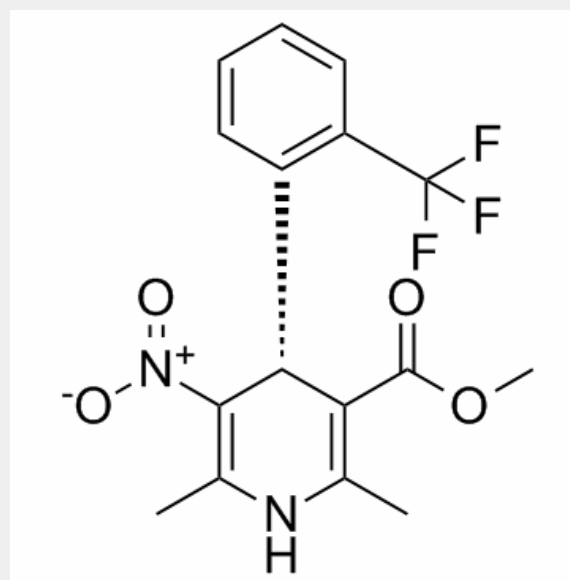
356.3

## Product Description

Bay-K-8644 (R)-(+)- is a **calcium channel** inhibitor. Bay-K-8644 (R)-(+)- inhibits Ba<sup>2+</sup> currents (**I<sub>Ba</sub>**) (**IC<sub>50</sub>**=975 nM).

IC50 & Target: IC50: 975 nM (I<sub>Ba</sub>)<sup>[1]</sup>

**In Vitro:** (±)-Bay K 8644, a conventional racemic mixture of Bay K 8644, is widely used as an L-type Ca<sup>2+</sup> channel agonist. Each optical isomer possesses opposite effects on I<sub>Ba</sub>, Bay-K-8644 (R)-(+)- as an antagonist and S(-)-Bay K 8644 as an agonist. Bay-K-8644 (R)-(+)- inhibits Ba<sup>2+</sup> currents (I<sub>Ba</sub>) (IC<sub>50</sub>=975 nM). When Bay-K-8644 (R)-(+)- (0.5 μM) is applied, I<sub>Ba</sub> is suppressed to 71±10% of control. In the presence of Bay-K-8644 (R)-(+)- (0.5 μM), additional application of forskolin and sodium nitroprusside (SNP) further inhibits I<sub>Ba</sub><sup>[1]</sup>. Bay-K-8644 (R)-(+)- is a calcium channel inhibitor<sup>[2]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!