

Datasheet

Inhibitors / Agonists / Screening Libraries

A DRUG SCREENING EXPERT

Product Name : (R)-(+)-Bay K 8644
Catalog Number : TQ0145
CAS Number : 98791-67-4
Molecular Formula : C16H15F3N2O4
Molecular Weight : 356.30

Description: (R)-(+)-Bay K 8644 is a calcium channel inhibitor. It inhibits Ba²⁺ currents (IBa) (IC₅₀: 975 nM).

Storage: 2 years -80°C in solvent; 3 years -20°C powder;

Solubility	DMSO	≥300mg/mL(841.98 mM)
	(< 1 mg/ml refers to the product slightly soluble or insoluble)	

In vitro Activity

(±)-Bay K 8644, a conventional racemic mixture of Bay K 8644, is widely used as an L-type Ca²⁺ channel agonist. Each optical isomer possesses opposite effects on IBa, (R)-(+)-Bay K 8644 as an antagonist and S(-)-Bay K 8644 as an agonist. (R)-(+)-Bay K 8644 inhibits Ba²⁺ currents (IBa) (IC₅₀: 975 nM). When (R)-(+)-Bay K 8644 (0.5 μM) is applied, IBa is suppressed to 71±10% of control. In the presence of (R)-(+)-Bay K 8644 (0.5 μM), an additional application of forskolin and sodium nitroprusside (SNP) further inhibits IBa.

Reference

1. Zhu HL, et al. Antagonistic actions of S(-)-Bay K 8644 on cyclic nucleotide-induced inhibition of voltage-dependent Ba(2+) currents in guinea pig gastric antrum. Naunyn Schmiedebergs Arch Pharmacol. 2008 Dec;378(6):609-15.

FOR RESEARCH PURPOSES ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

Information for product storage and handling is indicated on the product datasheet. Targetmol products are stable for long term under the recommended storage conditions. Our products may be shipped under different conditions as many of them are stable in the short-term at higher or even room temperatures. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, please follow the storage recommendations on the product data sheet.