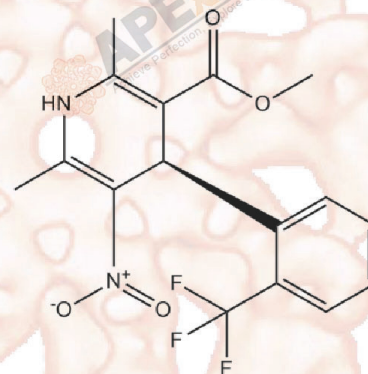


Product Data Sheet

(±)-Bay K 8644

Cat. No.:	A8632
CAS No.:	71145-03-4
Formula:	C ₁₆ H ₁₅ F ₃ N ₂ O ₄
M.Wt:	356.3
Synonyms:	
Target:	Ubiquitination/ Proteasome
Pathway:	Autophagy
Storage:	Store at -20°C



Solvent & Solubility

≥36.2 mg/mL in DMSO; ≥11.4 mg/mL in EtOH; insoluble in H₂O

In Vitro

	Solvent Concentration	Mass	1mg	5mg	10mg
Preparing Stock Solutions	1 mM		2.8066 mL	14.0331 mL	28.0662 mL
	5 mM		0.5613 mL	2.8066 mL	5.6132 mL
	10 mM		0.2807 mL	1.4033 mL	2.8066 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary

L-type Ca²⁺-channel activator

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	Guinea Pig and Calf Myocardial Cells
Preparation method:	Soluble to 100 mM in ethanol. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	280 nM, 5 minutes
Applications:	Bay k 8644 increased twitch tension in guinea pig atria without changing the time course of tension development. Bay k 8644 increased the action potential

duration of calf ventricular muscle and Purkinje fibers. Bay k 8644 increased strontium currents and altered the time- and voltage-dependence of channel opening.

Animal experiment

Animal models:	Male Sprague-Dawley rats
Dosage form:	Intraperitoneal administration, 0.5-4 mg/kg
Applications:	Intraperitoneal administration of BAY K 8644 (0.5-4 mg/kg) induced an increase in blood pressure associated with bradycardia, increased tail-flick latency in response to radiant heat, decreased locomotion, induced muscle contraction, postural changes and also reduced reflex activity. BAY K 8644 (4 mg/kg, i.p.) significantly increased homovanillic acid and 3,4-dihydroxyphenylacetic acid concentrations in the cortex and striatum.
Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

In Vivo

Product Citations

See more customer validations on www.apexbt.com.

References

- [1]. Thomas G, Chung M, Cohen C J. A dihydropyridine (Bay k 8644) that enhances calcium currents in guinea pig and calf myocardial cells. A new type of positive inotropic agent[J]. Circulation research, 1985, 56(1): 87-96.
- [2]. Bourson A, Moser P C, Gower A J, et al. Central and peripheral effects of the dihydropyridine calcium channel activator BAY K 8644 in the rat[J]. European journal of pharmacology, 1989, 160(3): 339-347.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

APEx BIO Technology

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com

