Data Sheet (Cat.No.T14504)

TargetMol
A DRUG SCREENING EXPERT

BAY 38-7271

Chemical Properties

CAS No.:	212188-60-8
Formula:	C20H21F3O5S
Molecular Weight:	430.44
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	BAY 38-7271 has strong neuroprotective properties.[1] BAY 38-7271 is selective and highly potent and cannabinoid CB1/CB2 receptor agonist. With Kis of 1.85 nM and 5.96 nM for recombinant human CB1 receptor and CB2 receptor, respectively.
Targets(IC_{50})	CB1: 1.85 nM (ki) CB2: 5.96 nM (ki)
In vitro	BAY 38-7271 shows only minor interactions at the micromolar range with other binding sites such as adenosine A3 receptor (IC50 = 7.5 μM), peripheral GABAA benzodiazepine receptor (IC50 = 971 nM), at the monoamine transporter (IC50 = 1.7 μM), and melatonin ML1 receptor (IC50 = 3.3 μM)[1].
In vivo	BAY 38-7271 (Ed50 = 0.02 mg/kg; i.v. and 0.5 mg/kg; i.p.) induces a potent and dose-de-pendent reduction in core body temperature[1]. BAY 38-7271 (1-1000 ng/kg/h; i.v. infusion; for 4 hours) shows neuroprotective efficacy in the rat SDH model[1]. BAY 38-7271 has low physical dependence liability and is not essentially different from that of other cannabinoid CB1 receptor agonists[1] and it also has neuroprotective efficacy in models of transient and permanent occlusion of the middle cerebral artery and brain edema models[1].

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.323 mL	11.616 mL	23.232 mL
5 mM	0.465 mL	2.323 mL	4.646 mL
10 mM	0.232 mL	1.162 mL	2.323 mL
50 mM	0.046 mL	0.232 mL	0.465 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Mauler F, et al. BAY 38-7271: a novel highly selective and highly potent cannabinoid receptor agonist for the treatment of traumatic brain injury. CNS Drug Rev. 2003 Winter;9(4):343-58.

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