GR 89696

Cat. No.: HY-107747

CAS No.: 126766-32-3

Molecular Formula: $C_{23}H_{29}Cl_2N_3O_7$

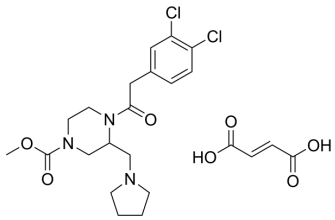
Molecular Weight: 530.4

Target: Opioid Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 50 mg/mL (94.27 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	1.8854 mL	9.4268 mL	18.8537 mL
5 mM	0.3771 mL	1.8854 mL	3.7707 mL
10 mM	0.1885 mL	0.9427 mL	1.8854 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (4.71 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (4.71 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (4.71 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

GR 89696 is a highly selective κ2 opioid receptor agonist with potential to prevent pruritus[1].

In Vivo

GR 89696 (intramuscular injection, 0.01-0.1 μg/kg) attenuates the scratching response induced by intrathecal morphine (0.03mg) in a dose-dependent manner without affecting the analgesic effect of morphine[1].

GR-896960(subcutaneous injection, 1 mg/kg) reduces cerebral artery infarct volume by 38% in a rat model of permanent focal ischemia[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Mei-Chuan Ko, et al. Effects of atypical kappa-opioid receptor agonists on intrathecal morphine-induced itch and analgesia in primates. J Pharmacol Exp Ther. 2009 Jan;328(1):193-200.

[2]. A Barber, et al. Effects of GR-89696 and the novel peripherally selective OP2 agonists, EMD-61569 and EMD-61747, against focal cerebral ischemia in the rat. Methods Find Exp Clin Pharmacol. 1999 Mar;21(2):105-13

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA