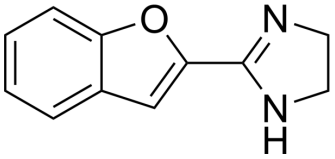
RX 801077

Cat. No.:	HY-100904A
CAS No.:	72583-92-7
Molecular Formula:	$C_{11}H_{10}N_2O$
Molecular Weight:	186.21
Target:	Imidazoline Receptor
Pathway:	Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	RX 801077 (2 BFI free base) is a selective imidazoline I2 receptor (I2R) agonist with a K_i value of 70.1 nM. RX 801077 shows anti-inflammation and neuroprotection. RX 801077 has the potential for the research of traumatic brain injury (TBI)[1][2].
IC_{50} & Target	K_i: 70.1 nM (imidazoline I2 receptor)[2]
In Vivo	RX 801077 (5, 10, 20 mg/kg; i.p.; twice daily for 3 days) inhibits NLRP3 inflammasome-induced inflammation and necroptosis in a rat model of traumatic brain injury[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	280-300 g, Male adult Sprague-Dawley rats (TBI model)[2]
Dosage:	5, 10, 20 mg/kg
Administration:	I.p.; twice daily for 3 days
Result:	Attenuated neurological deficits, brain edema, BBB permeability and cortical tissue loss in a rat model of TBI, reduced microglial activation, neutrophil infiltration, and proinflammatory cytokine IL-1β secretion, reduced the expression of RIP1 and RIP3 in neurons in the pericontusional cortex.

REFERENCES

[1]. Carpéné C, et al. Inhibition of amine oxidase activity by derivatives that recognize imidazoline I2 sites. J Pharmacol Exp Ther. 1995 Feb;272(2):681-8.

[2]. Ni H, et al. 2-BFI Provides Neuroprotection Against Inflammation and Necroptosis in a Rat Model of Traumatic Brain Injury. Front Neurosci. 2019 Jun 26;13:674.

Caution: Product has not been fully validated for medical applications. For research use only.

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