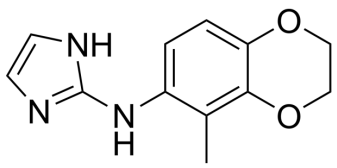
AGN 192836

Cat. No.:	HY-100300
CAS No.:	171102-29-7
Molecular Formula:	$C_{12}H_{13}N_3O_2$
Molecular Weight:	231.25
Target:	Adrenergic 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 : 80 mg/mL (345.95 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	4.3243 mL	21.6216 mL	43.2432 mL
5 mM	0.8649 mL	4.3243 mL	8.6486 mL
10 mM	0.4324 mL	2.1622 mL	4.3243 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 (10.81 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (10.81 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

AGN 192836 is a potent and selective α2 adrenergic agonist with EC_{50}s of 8.7, 41 and 6.6 nM for α2A, α2B and α2C receptor, respectively.

IC_{50} & Target

α adrenergic receptor

In Vitro

Binding assays demonstrates that AGN 192836 is 1200-fold selective for the α2A-receptor relative to the α1-receptor, 50-fold selective for the α2A-receptor relative to the α2B-receptor, and 10-fold selective for the α2Areceptor relative to the α2C-receptor[1].

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

In Vivo	AGN 192836 is equally efficacious when compared to brimonidine for the reduction of intraocular pressure upon topical administration to the rabbit and more efficacious than brimonidine for the reduction of blood pressure upon intravenous administration to monkey[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

PROTOCOL

Animal Administration [1]	Rabbit: A single drop of either brimonidine or AGN 192836 (0.001%) is applied unilaterally to rabbit eyes, and the intraocular pressure is monitored for 6 h post-administration[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Stephen M, et al. Synthesis and Evaluation of 2-(Arylamino)imidazoles as α2-Adrenergic Agonists. J. Med. Chem., 1997, 40 (1), pp 18–23

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