Proteins

Product Data Sheet

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 $\alpha 2$ adrenergic agonist with EC ₅₀ s of 8.7, 41 and 6.6 nM for $\alpha 2A$, $\alpha 2B$ and $\alpha 2C$ receptor, respectively.
IC ₅₀ & Target	α adrenergic receptor
In Vitro	Binding assays demonstrates that AGN 192836 is 1200-fold selective for the α 2A-receptor relative to the α 1-receptor, 50-fold selective for the α 2A-receptor relative to the α 2B-receptor, and 10-fold selective for the α 2Areceptor relative to the α 2C-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

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

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