Clonidine

Cat. No.: HY-12721

CAS No.: 4205-90-7

Molecular Formula: $C_9H_9Cl_2N_3$

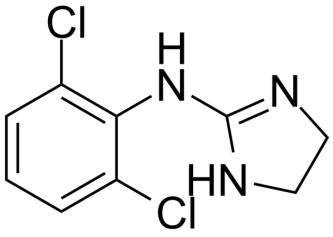
Molecular Weight: 230.09

Target: Adrenergic Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: 4°C, protect from light

* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (434.61 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	4.3461 mL	21.7306 mL	43.4613 mL
5 mM	0.8692 mL	4.3461 mL	8.6923 mL
10 mM	0.4346 mL	2.1731 mL	4.3461 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 (10.87 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (10.87 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (10.87 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Clonidine is an alpha 2-adrenergic agonist[1].

IC_{50} & Target

alpha 2-adrenergic[1]

In Vitro

Clonidine suppresses the firing activity of neurons[1].

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

CUSTOMER VALIDATION

- Cell Rep. 2019 Dec 3;29(10):2929-2935.e4
- Neurosci Bull. 2022 Apr;38(4):386-402.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Alojado ME, et al. The effect of clonidine on the activity of neurons in the rat dorsal raphe nucleus in vitro. Anesth Analg. 1994 Aug;79(2):257-60.

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