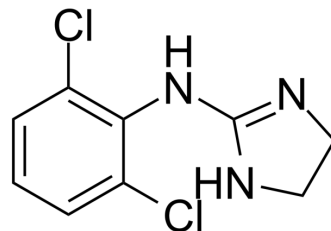


Clonidine

Cat. No.:	HY-12721
CAS No.:	4205-90-7
Molecular Formula:	C ₉ H ₉ Cl ₂ N 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)				
		Solvent Concentration	Mass		
	Preparing Stock Solutions		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] .
IC₅₀ & 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.

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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.

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

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