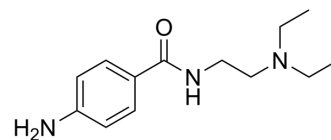


Procainamide

Cat. No.:	HY-A0084A
CAS No.:	51-06-9
Molecular Formula:	C ₁₃ H ₂₁ N ₃ O
Molecular Weight:	235.33
Target:	DNA Methyltransferase
Pathway:	Epigenetics
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 50 mg/mL (212.47 mM; Need ultrasonic)						
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg	
				1 mM	4.2494 mL	21.2468 mL	42.4935 mL
				5 mM	0.8499 mL	4.2494 mL	8.4987 mL
				10 mM	0.4249 mL	2.1247 mL	4.2494 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: ≥ 1.25 mg/mL (5.31 mM); Clear solution						
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 1.25 mg/mL (5.31 mM); Clear solution						
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 1.25 mg/mL (5.31 mM); Clear solution						

BIOLOGICAL ACTIVITY

Description	Procainamide is a specific and potent inhibitor of DNA methyltransferase 1 (DNMT1). Procainamide is a Class 1A antiarrhythmic agent. Procainamide has the potential for the research of cancer and arrhythmias ^{[1][2]} .
IC ₅₀ & Target	DNMT1 ^[1]

CUSTOMER VALIDATION

-
- Clin Chem. 2019 Dec;65(12):1522-1531.
 - Environ Pollut. 2023 May 31;121931.
 - Patent. US20180263995A1.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Lee BH, et al. Procainamide is a specific inhibitor of DNA methyltransferase 1. J Biol Chem. 2005;280(49):40749-40756.

[2]. Pritchard B, et al. Procainamide. [Updated 2021 Aug 8]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan-.

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