Sigma-1 receptor antagonist 1

Cat. No.: HY-125821

CAS No.: 1639220-19-1

Molecular Formula: $C_{19}H_{23}Cl_2N_3O$

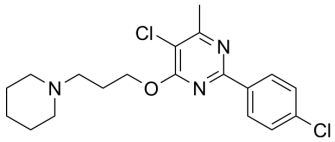
Molecular Weight: 380.31

Target: Sigma Receptor

Pathway: 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 : 6.25 mg/mL (16.43 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.6294 mL	13.1472 mL	26.2943 mL
5 mM	0.5259 mL	2.6294 mL	5.2589 mL
10 mM	0.2629 mL	1.3147 mL	2.6294 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

SigmaX1 receptor antagonist 1 (compound 137) is a potent and selective sigma-1 receptor (σ1R) antagonist, with a high binding affinity to σ1R receptor (K_i = 1.06 nM). SigmaX1 receptor antagonist 1 exhibits antineuropathic pain activity and acts as a promising agent for the treatment of neuropathic pain[1].

IC_{50} & Target

Sigma 1 Receptor

In Vitro

Sigma?1 receptor antagonist 1 exhibits a high binding affinity to σ1R receptor (K_i = 1.06 nM) and good σ-1/2 selectivity (1344-fold)[1].

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

In Vivo

Sigma?1 receptor antagonist 1 exerts dose-dependent antinociceptive effects in mice formalin model and rats CCI models of neuropathic pain[1].

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REFERENCES

[1]. Lan Y, et al. Synthesis and biological evaluation of novel sigma-1 receptor antagonists based on pyrimidine scaffold as agents for treating neuropathic pain. J Med Chem. 2014 Dec 26;57(24):10404-23.

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