# **Product** Data Sheet

## Sigma-1 receptor antagonist 2

Cat. No.: HY-125819 CAS No.: 1639220-15-7 Molecular Formula:  $C_{20}H_{26}CIN_{3}O_{2}$ Molecular Weight: 375.89

Target: Sigma Receptor Pathway: **Neuronal Signaling** 

Storage: Powder -20°C 3 years

2 years

In solvent -80°C 2 years

> -20°C 1 year

#### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 86.67 mg/mL (230.57 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.6604 mL	13.3018 mL	26.6035 mL
	5 mM	0.5321 mL	2.6604 mL	5.3207 mL
	10 mM	0.2660 mL	1.3302 mL	2.6604 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: ≥ 2.17 mg/mL (5.77 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.17 mg/mL (5.77 mM); Clear solution

### **BIOLOGICAL ACTIVITY**

Description	Sigma-1 receptor antagonist 2 is a potent and selective sigma 1 receptor ( $\sigma$ 1 R) antagonist with K <sub>i</sub> s of 3.88 and 1288 nM for $\sigma$ 1 and $\sigma$ 2 receptor, respectively <sup>[1]</sup> .
IC <sub>50</sub> & Target	Sigma 1 Receptor

#### **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.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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