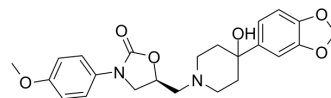


## Panamesine

Cat. No.:	HY-136280		
CAS No.:	139225-22-2		
Molecular Formula:	C <sub>23</sub> H <sub>26</sub> N <sub>2</sub> O <sub>6</sub>		
Molecular Weight:	426.46		
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 : 125 mg/mL (293.11 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	2.3449 mL	11.7244 mL	23.4489 mL
		5 mM	0.4690 mL	2.3449 mL	4.6898 mL
		10 mM	0.2345 mL	1.1724 mL	2.3449 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: ≥ 3.79 mg/mL (8.89 mM); Suspended solution				
	2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (4.88 mM); Clear solution				

### BIOLOGICAL ACTIVITY

Description	Panamesine (EMD 57445) is a sigma receptor ligand, which has a high affinity (IC <sub>50</sub> 6 nM) and selectivity for sigma binding sites. Panamesine is a potential atypical neuroleptic agent <sup>[1]</sup> .
IC <sub>50</sub> & Target	IC <sub>50</sub> : 6 nM (sigma receptor) <sup>[1]</sup>
In Vivo	Panamesine (EMD 57445; 0.3, 1, 3, 30 mg/kg) induces a dose-dependent increase of c-fos expression in several cortical areas with the strongest signals in the piriform cortex <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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Animal Model:	Female Sprague Dawley rats aged 2 months with a body weights of 200-250 g <sup>[1]</sup>
Dosage:	0.3, 1, 3, 30 mg/kg
Administration:	Subcutaneous injections
Result:	Specific c-fos gene expression was detected at all concentrations (0.3 mg/kg, 1 mg/kg, 3 mg/kg, 30 mg/kg) tested in frontal, parietal, perirhinal, temporal, piriform, insular, limbic, cingulate and occipital cortex.

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## REFERENCES

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[1]. N Dahmen, et al. Induction of C-Fos Gene Expression by the Selective Sigma Receptor Ligand EMD 57445 in Rat Brain. Eur Neuropsychopharmacol. 1996 Aug;6(3):237-43.

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

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