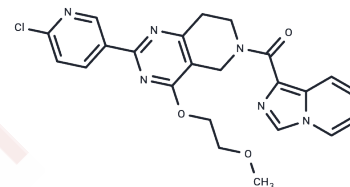


## THPP-1

## Chemical Properties

CAS No. :	1257051-63-0
Formula:	C <sub>23</sub> H <sub>21</sub> ClN <sub>6</sub> O <sub>3</sub>
Molecular Weight:	464.9
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



## Biological Description

Description	THPP-1 is a potent and orally bioavailable inhibitor of PDE10A (K <sub>i</sub> of 1 nM and 1.3 nM for human and rat PDE10A, respectively).
Targets(IC <sub>50</sub> )	PDE
In vivo	Consistent with rodent data, both THPP-1 and risperidone significantly attenuated the stimulant effects in SIMA when administered alone, though some differences were noted. Combination therapy with a low dose of risperidone produced significantly more robust effects. THPP-1 and risperidone also produced a marked reduction of wake cycle time and gamma frequency power in EEG. However, THPP-1 differed from risperidone by reducing spectral power of lower frequencies[1].

## Solubility Information

Solubility	DMSO: 31 mg/mL (66.68 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.151 mL	10.755 mL	21.510 mL
5 mM	0.4302 mL	2.151 mL	4.302 mL
10 mM	0.2151 mL	1.0755 mL	2.151 mL
50 mM	0.043 mL	0.2151 mL	0.4302 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Vardigan JD, et al. Behavioral and qEEG effects of the PDE10A inhibitor THPP-1 in a novel rhesus model of antipsychotic activity. *Psychopharmacology (Berl)*. 2016 Jul;233(13):2441-50.

Smith SM, et al. The novel phosphodiesterase 10A inhibitor THPP-1 has antipsychotic-like effects in rat and improves cognition in rat and rhesus monkey. *Neuropharmacology*. 2013 Jan;64:215-23.

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