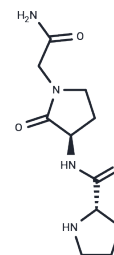


## PAOPA

## Chemical Properties

CAS No. :	114200-31-6
Formula:	C <sub>11</sub> H <sub>18</sub> N <sub>4</sub> O <sub>3</sub>
Molecular Weight:	254.29
Storage:	Keep away from moisture Powder: -20°C for 3 years   In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



## Biological Description

Description	PAOPA is a novel dopamine D2 receptor modulator and L-proline-L-leucine-glycine amide (PLG) peptide mimetic that prevents and reverses behavioral and biochemical abnormalities in preclinical animal models of schizophrenia sensitized to amphetamine. PAOPA has been used in the study of schizophrenia and extrapyramidal dysfunction.
Targets(IC50)	Dopamine Receptor
In vitro	10 μM PAOPA, treated for 1.5 hr increased striatal expression of GRK2 in D2/eYFP-labeled cells and promoted expression of arrestin-3, phosphorylated ERK1 and ERK2. 10 μM PAOPA, treated for 48 h then promoted internalization of D2 receptors in D2/eYFP-labeled cells. [1]
In vivo	In chronic administration, intraperitoneal injection of 1 mg/kg PAOPA once daily for 45 days enhanced D2 receptor modulation and up-regulated the expression of downstream molecules (e.g., GRK2, arrestin-3, and phosphorylated ERK 1/2) in mice. [1]

## Solubility Information

Solubility	DMSO: 45 mg/mL (176.96 mM),Sonication is recommended. H2O: <25.43 mg/mL,Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	3.9325 mL	19.6626 mL	39.3252 mL
5 mM	0.7865 mL	3.9325 mL	7.865 mL
10 mM	0.3933 mL	1.9663 mL	3.9325 mL
50 mM	0.0787 mL	0.3933 mL	0.7865 mL

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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

Beyaert MG, et al. PAOPA, a potent dopamine D2 receptor allosteric modulator, prevents and reverses behavioral and biochemical abnormalities in an amphetamine-sensitized preclinical animal model of schizophrenia. *Eur Neuropsychopharmacol.* 2013 Mar;23(3):253-62.

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