Product Data Sheet

NPEC-caged-dopamine

Cat. No.: HY-103427

CAS No.: 1257326-23-0 Molecular Formula: $C_{17}H_{18}N_2O_6$

Molecular Weight: 346

Target: Dopamine Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

SOLVENT & SOLUBILITY

In Vitro

DMSO: 125 mg/mL (361.27 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.8902 mL	14.4509 mL	28.9017 mL
	5 mM	0.5780 mL	2.8902 mL	5.7803 mL
	10 mM	0.2890 mL	1.4451 mL	2.8902 mL

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

BIOLOGICAL ACTIVITY

Description

NPEC-caged-dopamine is a caged version of dopamine. NPEC-caged-Dopamine was used by applying focal photolysis with UV light (360 nm) to releases dopamine, which leads to D1 receptor activation $^{[1]}$.

REFERENCES

[1]. Liliana R V Castro, et al. Striatal neurones have a specific ability to respond to phasic dopamine release. J Physiol. 2013 Jul 1;591(13):3197-214.

[2]. Alba Bellot-Saez, et al. Neuromodulation of Astrocytic K+ Clearance. Int J Mol Sci. 2021 Mar 3;22(5):2520.

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

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