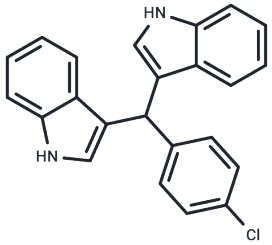
Data Sheet (Cat.No.T3106)

TargetMol

C-DIM12

Chemical Properties



CAS No. : 178946-89-9

Formula: C23H17ClN2

Molecular Weight: 356.85

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	C-DIM12 induced expression of Nurr1-regulated genes. C-DIM12 increased expression of transfected human Nurr1, induced Nurr1 protein expression in primary dopaminergic neurons and enhanced neuronal survival from exposure to 6-OHDA.
Targets(IC50)	Apoptosis,NR4A
In vitro	C-DIM12 induces Nurr1 and DA gene expression in cell lines and primary neurons[3]. C-DIM12 suppresses astrocyte inflammatory signaling in vitro. C-DIM12 inhibits lipopolysaccharide (LPS)-induced expression of NF-κB-regulated genes in BV-2 microglia including nitric oxide synthase (NOS2), interleukin-6 (IL-6), and chemokine (C-C motif) ligand 2 (CCL2), and the effects were attenuated by Nurr1-RNA interference. Additionally, C-DIM12 decreased NF-κB activation in NF-κB-GFP (green fluorescent protein) reporter cells and enhanced nuclear translocation of Nurr1 primary microglia. C-DIM12 decreases lipopolysaccharide-induced p65 binding to the NOS2 promoter and concurrently enhanced binding of Nurr1 to the p65-binding site. C-DIM12 also stabilized binding of the Corepressor for Repressor Element 1 Silencing Transcription Factor (CoREST) and the Nuclear Receptor Corepressor 2 (NCOR2)[2].
In vivo	C-DIM12 has the neuroprotective activity in MPTPp-treated mice[2].
Cell Research	NF-κB-GFP HEK cells are exposed to 30 ng/ml of TNFα in the presence of 100 μM C-DIM12 for up to 24 hours. C-DIM12 is efficient at blocking NF-κB-GFP expression in the NF-κB-GFP HEK cells after TNFα treatment, displaying a statistically significant reduction in total GFP fluorescence per cell.(Only for Reference)

Solubility Information

Solubility	DMSO: 50 mg/mL (140.11 mM),Sonication is recommended. Ethanol: 35.7 mg/mL (100.04 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8023 mL	14.0115 mL	28.023 mL
5 mM	0.5605 mL	2.8023 mL	5.6046 mL
10 mM	0.2802 mL	1.4011 mL	2.8023 mL
50 mM	0.056 mL	0.2802 mL	0.5605 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

De Miranda BR, et al. Toxicol Sci. 2015, 143(2):360-373.
De Miranda BR, et al. Mol Pharmacol. 2015, 87(6):1021-1034.
Hammond SL, et al. Neurosci Lett. 2015, 607:83-89.

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