

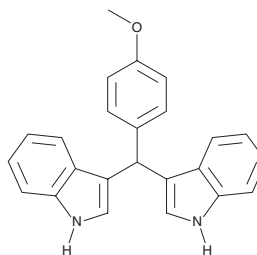
PRODUCT INFORMATION



C-DIM5

Item No. 27980

CAS Registry No.: 33985-68-1
Formal Name: 3,3'-[(4-methoxyphenyl)methylene]bis-1H-indole
Synonym: DIM-C-*p*PhOCH₃
MF: C₂₄H₂₀N₂O
FW: 352.4
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

C-DIM5 is supplied as a solid. A stock solution may be made by dissolving the C-DIM5 in the solvent of choice, which should be purged with an inert gas. C-DIM5 is soluble in DMSO.

Description

C-DIM5 is a *para*-phenyl-substituted diindolylmethane (C-DIM) and an agonist of the orphan receptor nuclear receptor-related protein 77 (Nur77).¹ It selectively activates Nur77 over peroxisome proliferator receptor γ (PPAR γ) in reporter assays when used at a concentration of 20 μ M. C-DIM5 (10, 15, and 20 μ M) inhibits growth of and induces apoptosis in L3.6pL pancreatic cancer cells.² It stabilizes nuclear localization of Nur77 and Nurr1 and reduces secretion of the pro-inflammatory cytokines IL-2, IL-6, IL-12p70, CCL2, and CCL5 in primary mouse astrocytes.³ Oral administration of C-DIM5 (50 mg/kg) prevents loss of dopaminergic neurons in the substantia nigra pars compacta and striatal dopamine terminals in a mouse model of Parkinson's disease induced by MPTP.⁴

References

1. Chintharlapalli, S., Burghardt, R., Papineni, S., *et al.* Activation of Nur77 by selected 1,1-Bis(3'-indolyl)-1-(*p*-substituted phenyl)methanes induces apoptosis through nuclear pathways. *J. Biol. Chem.* **280**(26), 24903-24914 (2005).
2. Yoon, K., Lee, S.O., Cho, S.D., *et al.* Activation of nuclear TR3 (NR4A1) by a diindolylmethane analog induces apoptosis and proapoptotic genes in pancreatic cancer cells and tumors. *Carcinogenesis* **32**(6), 836-842 (2011).
3. Popichak, K.A., Hammond, S.L., Moreno, J.A., *et al.* Compensatory expression of Nur77 and Nurr1 regulates NF- κ B-dependent inflammatory signaling in astrocytes. *Mol. Pharmacol.* **94**(4), 1174-1186 (2018).
4. De Miranda, B.R., Miller, J.A., Hansen, R.J., *et al.* Neuroprotective efficacy and pharmacokinetic behavior of novel anti-inflammatory *para*-phenyl substituted diindolylmethanes in a mouse model of Parkinson's disease. *J. Pharmacol. Exp. Ther.* **345**(1), 125-138 (2013).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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