

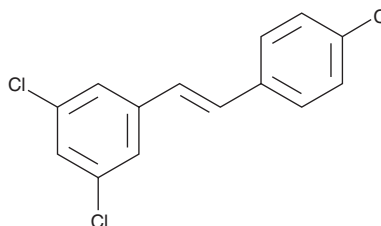
PRODUCT INFORMATION



PDM 2

Item No. 10006342

CAS Registry No.: 688348-25-6
Formal Name: 1,3-dichloro-5-[(1E)-2-(4-chlorophenyl)ethenyl]-benzene
MF: C₁₄H₉Cl₃
FW: 283.6
Purity: ≥98%
UV/Vis.: λ_{max}: 214, 302, 313 nm
Supplied as: A crystalline 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

PDM 2 is supplied as a crystalline solid. A stock solution may be made by dissolving the PDM 2 in the solvent of choice, which should be purged with an inert gas. PDM 2 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of PDM 2 in ethanol is approximately 2 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Description

The aryl hydrocarbon receptor (AhR) is a ligand-dependent intracellular transcription factor whose ligands include some of the most infamous xenobiotics, including dioxin, benzo[a]pyrene, and numerous polyaromatics from soot and coal tar.¹ PDM 2 is an analog of resveratrol acting as a potent and selective aryl hydrocarbon receptor (AhR) antagonist, with a K_i of 1.2 nM.² PDM 2 is inactive as a ligand for the estrogen receptor even at 100 μM. As AhR knockout mice are insensitive to the carcinogenic effects of classical AhR ligands, PDM 2 is a potential therapeutic for the treatment for dioxin and other aryl hydrocarbon poisonings.

References

1. Denison, M.S. and Nagy, S.R. Activation of the aryl hydrocarbon receptor by structurally diverse exogenous and endogenous chemicals. *Annu. Rev. Pharmacol. Toxicol.* **43**, 309-334 (2003).
2. de Medina, P., Casper, R., Savouret, J.-F., *et al.* Synthesis and biological properties of new stilbene derivatives of resveratrol as new selective aryl hydrocarbon modulators. *J. Med. Chem.* **48(1)**, 287-291 (2005).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/19/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM