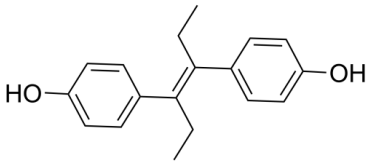
Data Sheet

Product Name:	Diethylstilbestrol
Cat. No.:	CS-2338
CAS No.:	56-53-1
Molecular Formula:	C18H20O2
Molecular Weight:	268.35
Target:	Estrogen Receptor/ERR
Pathway:	Others
Solubility:	DMSO : 50 mg/mL (186.32 mM; Need ultrasonic); Methanol : ≥ 33.33 mg/mL (124.20 mM)



BIOLOGICAL ACTIVITY:

Diethylstilbestrol, a synthetic nonsteroidal estrogen used in the treatment of menopausal and postmenopausal disorders. Target: Estrogen Receptor/ERR Diethylstilbestrol (DES), a synthetic estrogen that was used in pregnancy, is a prototype endocrine-disrupting chemical. Although prenatal exposure to DES is known to increase risks of vaginal/cervical adenocarcinoma and adverse reproductive outcomes in women, and urogenital anomalies in men, data on nonreproductive medical conditions are lacking. Comparing persons exposed prenatally to DES with those who were not exposed, the hazard ratios were 1.21 (95% confidence interval = 0.96-1.54) for diabetes, 1.27 (1.00-1.62) for all cardiovascular disease, 1.18 (0.88-1.59) for coronary artery disease, 1.28 (0.88-1.86) for myocardial infarction, 1.12 (1.02-1.22) for high cholesterol, 1.14 (1.02-1.28) for hypertension, 1.24 (0.99-1.54) for osteoporosis, and 1.30 (0.95-1.79) for fractures. The associations did not differ by dose and timing of DES exposure, nor, in the women, by the presence or absence of vaginal epithelial changes (a marker of DES host susceptibility) [1]. The role of prenatal exposure to DES as an environmental risk factor for psychiatric disorders requires more evidence before any conclusions can be drawn [2].

References:

[1]. Troisi, R., et al., Medical conditions among adult offspring prenatally exposed to diethylstilbestrol. Epidemiology, 2013. 24(3): p. 430-8.

[2]. Kebir, O. and M.O. Krebs, Diethylstilbestrol and risk of psychiatric disorders: a critical review and new insights. World J Biol Psychiatry, 2012. 13(2): p. 84-95.

CAIndexNames:

Phenol, 4,4'-[(1E)-1,2-diethyl-1,2-ethenediyl]bis-

SMILES:

OC1=CC=C(/C(CC)=C(CC)/C2=CC=C(O)C=C2)C=C1

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

Tel: 732-484-9848 Fax: 888-484-5008 E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA