

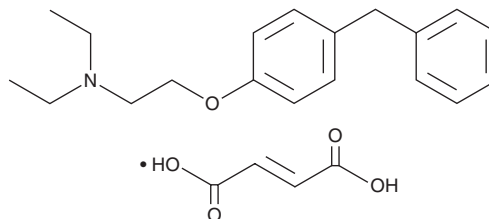
PRODUCT INFORMATION



DPPE (fumarate)

Item No. 35360

CAS Registry No.: 1185241-83-1
Formal Name: N,N-diethyl-2-[4-(phenylmethyl)phenoxy]-ethanamine
Synonyms: BMS-217380-01, Tesmilifene
MF: $C_{19}H_{25}NO \cdot C_4H_4O_4$
FW: 399.5
Purity: $\geq 98\%$
Supplied as: A solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



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

Laboratory Procedures

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

Description

DPPE is a ligand for the antiestrogen-binding site (AEBS; $K_i = 55.6$ nM in rat liver microsomes) and derivative of tamoxifen (Item No. 11629).¹ It is selective for the AEBS over the estrogen receptor when used at a concentration of 10 μM . DPPE is cytotoxic to S10 and MCF-7 cells (IC_{50} s = 7.5 and 12 μM) and inhibits antigen-induced histamine release in isolated rat mast cells ($IC_{50} = 65-85$ μM).^{2,3} It decreases uterine size in immature oophorectomized rats in a dose-dependent manner.⁴ DPPE (4 mg/kg) protects bone marrow progenitor cells from cytotoxicity induced by doxorubicin (Item No. 15007) in mice.²

References

1. Poirot, M., De Medina, P., Delarue, F., *et al.* Synthesis, binding and structure-affinity studies of new ligands for the microsomal anti-estrogen binding site (AEBS). *Bioorg. Med. Chem.* **8(8)**, 2007-2016 (2000).
2. Brandes, L.J., Labella, F.S., and Warrington, R.C. Increased therapeutic index of antineoplastic drugs in combination with intracellular histamine antagonists. *J. Natl. Cancer Inst.* **83(18)**, 1329-1336 (1991).
3. Grosman, N. Influence of DPPE on histamine release from isolated rat mast cells. *Agents Actions* **41(1-2)**, 1-4 (1994).
4. Brandes, L.J. and Hogg, G.R. Study of the in-vivo antioestrogenic action of N,N-diethyl-2-[4-(phenylmethyl)phenoxy]ethanamine HCl (DPPE), a novel intracellular histamine antagonist and antioestrogen binding site ligand. *J. Reprod. Fertil.* **89(1)**, 59-67 (1990).

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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