

Catalog # 10-2618 BADGE

CAS# 1675-54-3
Bisphenol A diglycidyl ether
2,3-Bis[4-(2,3-epoxypropoxy)phenyl]propane
Lot # X101930

PPAR γ antagonist with μ M affinity in 3T3-L1 and 3T3-F442A preadipocyte cells. Selective over PPAR δ and PPAR α . Antagonizes the ability of rosiglitazone to stimulate transcriptional activity of PPAR γ and abolishes its anti-inflammatory effects in a mouse model¹. Induces apoptosis via PPAR γ -independent mechanisms². Induces adipogenesis in human and mouse mesenchymal stromal stem cells and in mouse 3T3-L1 preadipocytes at low nM concentrations via a PPAR γ independent mechanism³. Increases osteoblastogenesis and bone mass in a mouse model⁴. Active *in vivo*.

- 1) Cuzzocrea et al. (2004), Rosiglitazone, a ligand of the peroxisome proliferator-activated receptor-gamma, reduces acute inflammation; Eur. J. Pharmacol., **483** 79
- 2) Fehlberg et al. (2003), Bisphenol A diglycidyl ether-induced apoptosis involves Bax/Bid-dependent mitochondrial release of apoptosis-inducing factor (AIF), cytochrome c and Smac/DIABLO; Br. J. Pharmacol., **139** 495
- 3) Chamorro-Garcia et al. (2012), Bisphenol A diglycidyl ether induces adipogenic differentiation of multipotent stromal stem cells through a peroxisome proliferator-activated receptor gamma-independent mechanism; Environ. Health Perspect., **120** 984
- 4) Duque et al. (2013), Pharmacological inhibition of PPARgamma increases osteoblastogenesis and bone mass in male C57BL/6 mice; J. Bone Miner. Res., **28** 639

PHYSICAL DATA

Molecular Weight: 340.41 Molecular Formula: $C_{21}H_{24}O_4$ Purity: 95% by HPLC

NMR: (Conforms)

Solubility: Soluble in DMSO (up to 30 mg/ml) or in Ethanol (up to 15 mg/ml)

Physical Description: White low melting point solid

Storage and Stability: Store as supplied, desiccated at -20°C for up to 1 year from the date of purchase.

Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

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