

Catalog # 10-1561

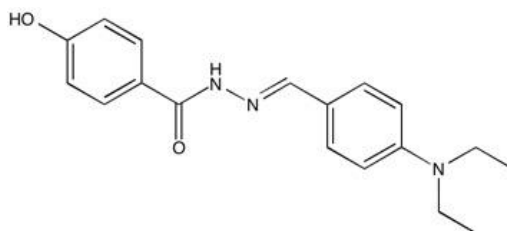
DY131

CAS# 95167-41-2

GSK-9089

N-(4-(Diethylaminobenzylidene)-N'-(4-hydroxybenzoyl)-hydrazine

Lot # S102111



Selective agonist at estrogen-related receptors $ERR\beta$ and $ERR\gamma$ with minimal activity at $ERR\alpha$, $ER\alpha$ and $ER\beta$ at concentrations up to 30 μ M.¹ Displays antiproliferative activity in prostate cancer cells.² Promotes hormone production and cell fusion in cytotrophoblasts.³ In breast cancer cells DY131 arrests cells in G2/M and causes mitotic spindle defects.⁴ Inhibits osteoclastogenesis and protects against inflammatory bone loss induced by LPS *in vivo*.⁵

- 1) Yu and Forman (2005), *Identification of an agonist ligand for estrogen-related receptors ERRbeta/gamma*; Bioorg. Med. Chem. Lett., **15** 1311
- 2) Yu *et al.* (2008), *Orphan nuclear receptor estrogen-related receptor-beta suppresses in vitro and in vivo growth of prostate cancer cells via p21 (WAF1/CIP1) induction and as a potential therapeutic target in prostate cancer*; Oncogene, **27** 3313
- 3) Poidatz *et al.* (2015), *Trophoblast syncytialisation necessitates mitochondrial function through estrogen-related receptor- τ* ; Mol. Hum. Reprod., **21** 206
- 4) Heckler *et al.* (2016), *Antimitotic activity of DY131 and the estrogen-related receptor beta 2 (ERR β 2) splice variant in breast cancer*; Oncotarget, **7** 47201
- 5) Kim *et al.* (2019), *Estrogen-related receptor τ negatively regulates osteoclastogenesis and protects against inflammatory bone loss*; J. Cell Physiol., **234** 1659

PHYSICAL DATA

Molecular Weight:	311.38
Molecular Formula:	C ₁₈ H ₂₁ N ₃ O ₂
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 30 mg/ml) or Ethanol (up to 8 mg/ml with warming)
Physical Description:	Yellow solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years 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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