

Catalog # 10-2622 GW-9662 22978-25-2

2-Chloro-5-nitrobenzanilide Lot # X101902



Selective PPAR γ antagonist (IC₅₀ = 3.3, 32 and 2000 nM for PPAR γ , PPAR α and PPAR δ respectively).¹ Blocks the inhibition of osteoclast formation induced by IL-4 (1-2 μ M).² Displays anticancer activity inhibits growth of human mammary tumor cell lines.³ A useful tool for dissecting the involvement of PPAR γ in cellular physiology.^{4,5}

- 1) Leesnitzer et al. (2002), Functional consequences of cysteine modification in the ligand binding sites of peroxisome proliferator activated receptors by GW9662; Biochemistry, **41** 6640
- 2) Bendixen et al. (2001), IL-4 inhibits osteoclast formation through a direct action on osteoclast precursors via peroxisome proliferator-activated receptor gamma 1; Proc. Natl. Acad. Sci. USA, **98** 2443
- Seargent et al. (2004), GW9662, a potent antagonist of PPARgamma inhibits growth of breast cancer tumour cells and promotes the anticancer effects of the PPARgamma agonist rosiglitazone, independently of PPARgamma activation; Br. J. Pharmacol., **143** 933
- 4) Cheng et al. (2014), β-Caryophyllene Ameliorates the Alzheimer-Like Phenotype in APP/PS1 Mice through CB2 Receptor Activation and the PPARγ Pathway; Pharmacology, **94** 1
- 5) Liu *et al.* (2014), Curcumin protects neurons against oxygen-glucose deprivation/reoxygenation-induced injury through activation of peroxisome proliferator-activated-γ function; J. Neuro. Sci. Res., **92** 1549

PHYSICAL DATA

| Molecular Weight: | 276.68 |
|------------------------|---|
| Molecular Formula: | C ₁₃ H ₉ CIN ₂ O ₃ |
| Purity: | 98% by TLC |
| | NMR: (Conforms) |
| Solubility: | DMSO (up to 50 mg/ml) or Ethanol (up to 10 mg/ml with warming) |
| Physical Description: | White or Off-white solid |
| Storage and Stability: | Store as supplied desiccated at room temperature for up to 2 years from the date of purchase. |
| | Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months. |

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