

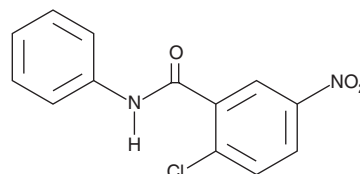
Product Information



GW 9662

Item No. 70785

CAS Registry No.: 22978-25-2
Formal Name: 2-chloro-5-nitrobenzanilide
MF: C₁₃H₉ClN₂O₃
FW: 276.7
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 261 nm



Laboratory Procedures

For long term storage, we suggest that GW 9662 be stored as supplied at -20°C. It should be stable for at least two years.

GW 9662 is supplied as a crystalline solid. A stock solution may be made by dissolving the GW 9662 in an organic solvent purged with an inert gas. GW 9662 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of GW 9662 in these solvents is approximately 2, 33, and 35 mg/ml respectively.

GW 9662 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, GW 9662 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. GW 9662 has a solubility of approximately 0.5 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

The peroxisome proliferator-activated receptor γ (PPAR γ) is the nuclear receptor responsible for transducing the therapeutic activity of the thiazolidinediones. Thiazolidinediones are a group of structurally related synthetic PPAR γ agonists with antidiabetic actions *in vivo*.^{1,2} Rosiglitazone (BRL 49653) is a prototypical thiazolidinedione and has served as a reference compound for this class.³ There are many PPAR γ agonists, including 15-deoxy- $\Delta^{12,14}$ -prostaglandin J₂ and azelaoyl PAF, which are naturally derived.^{4,5} However, only a few antagonists have been reported.⁶ GW 9662 blocks the PPAR γ -induced differentiation of monocytes to osteoclasts by >90% at a dose of 0.1 μ M.⁶ It is therefore a much more potent antagonist than BADGE, which is another reported PPAR γ antagonist.⁷

References

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- Maxey, K.M., Hessler, E., MacDonald, J., *et al.* The nature and composition of 15-deoxy- $\Delta^{12,14}$ -PGJ₂. *Prostaglandins and Other Lipid Mediators* **62**, 15-21 (2000).
- Bendixen, A.C., Shevde, N.K., Dienger, K.M., *et al.* IL-4 inhibits osteoclast formation through a direct action on osteoclast precursors *via* peroxisome proliferator-activated receptor γ 1. *Proc. Natl. Acad. Sci. USA* **98**, 2443-2448 (2001).
- Wright, H.M., Clish, C.B., Mikami, T., *et al.* A synthetic antagonist for the peroxisome proliferator-activated receptor γ inhibits adipocyte differentiation. *J. Biol. Chem.* **275**, 1873-1877 (2000).

Related Products

15-deoxy- $\Delta^{12,14}$ -Prostaglandin J₂ - Item No. 18570 • Azelaoyl PAF - Item No. 60924 • BADGE - Item No. 70790 • PPAR γ -PAK - Item No. 71000 • Ciglitazone - Item No. 71730 • Rosiglitazone - Item No. 71740 • Rosiglitazone (potassium salt) - Item No. 71742

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY; NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent *via* email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery**.

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