

**Product Name:** GW 9662

**Catalog No.:** 1508

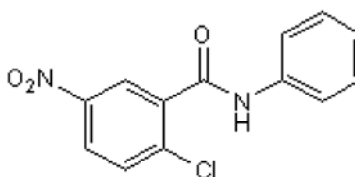
**Batch No.:** 2

CAS Number: 22978-25-2

IUPAC Name: 2-Chloro-5-nitro-*N*-phenylbenzamide

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>13</sub>H<sub>9</sub>N<sub>2</sub>O<sub>3</sub>Cl  
**Batch Molecular Weight:** 276.68  
**Physical Appearance:** Light yellow crystalline solid  
**Solubility:** ethanol to 25 mM with gentle warming  
DMSO to 100 mM  
**Storage:** Store at RT  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.3 (Ethyl acetate:Petroleum ether [1:4])  
**Melting Point:** Between 163 - 164°C  
**HPLC:** Shows >99.7% purity  
**<sup>1</sup>H NMR:** Consistent with structure

	Carbon Hydrogen Nitrogen		
	Theoretical	Found	
	56.43	56.43	10.12
	3.28	3.28	10.08

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

**Product Name:** GW 9662

**Catalog No.:** 1508

**Batch No.:** 2

CAS Number: 22978-25-2

IUPAC Name: 2-Chloro-5-nitro-*N*-phenylbenzamide

**Description:**

Selective irreversible PPAR $\gamma$  antagonist (IC<sub>50</sub> values are 3.3, 32 and 2000 nM for PPAR $\gamma$ , PPAR $\alpha$  and PPAR $\delta$  respectively). Blocks the inhibition of osteoclast formation induced by IL-4 in the low micromolar range (1-2  $\mu$ M), therefore is more potent than BADGE (Cat. No. 1326). Anticancer, inhibits growth of human mammary tumor cell lines.

**Physical and Chemical Properties:**

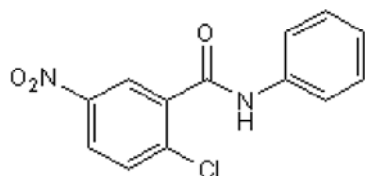
Batch Molecular Formula: C<sub>13</sub>H<sub>9</sub>N<sub>2</sub>O<sub>3</sub>Cl

Batch Molecular Weight: 276.68

Physical Appearance: Light yellow crystalline solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Store at RT

**Solubility & Usage Info:**

ethanol to 25 mM with gentle warming

DMSO to 100 mM

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**

**Seargent *et al*** (2004) GW9662, a potent antagonist of PPAR $\gamma$ , inhibits growth of breast tumour cells and promotes the anticancer effects of the PPAR $\gamma$  agonist rosiglitazone, independently of PPAR $\gamma$  activation. *Br.J.Pharmacol.* **143** 933. PMID: 15533890.

**Leesnitzer *et al*** (2002) Functional consequences of cysteine modification in the ligand binding sites of peroxisome proliferator activated receptors by GW9662. *Biochemistry* **41** 6640. PMID: 12022867.

**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.U.S.A.* **98** 2443. PMID: 11226258.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel:+1 612 379 2956