

Product Name: GW 4064

Catalog No.: 2473

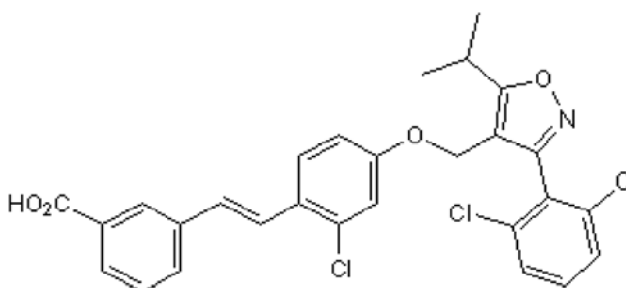
Batch No.: 13

CAS Number: 278779-30-9

IUPAC Name: 3-[2-[2-Chloro-4-[[3-(2,6-dichlorophenyl)-5-(1-methylethyl)-4-isoxazolyl]methoxy]phenyl]ethenyl]benzoic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₈H₂₂Cl₃NO₄.
Batch Molecular Weight: 542.84
Physical Appearance: White solid
Solubility: DMSO to 100 mM
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 98.3% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	61.95	4.09	2.58
Found	61.78	4.02	2.41

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

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Description:

GW 4064 is a potent and selective, non-steroidal farnesoid X receptor (FXR) agonist (EC₅₀ = 15 nM). GW 4064 displays no activity at other nuclear receptors at concentrations up to 1 μM. Improves hyperglycaemia and hyperlipidemia in diabetic db/db mice. Shown to suppress autophagy in nutrient-deprived mouse hepatocytes. GW 4064 protects against lipopolysaccharide (LPS)-induced liver inflammation and apoptosis in mice. GW 4064 reduces Leptin signaling pathway activation in breast cancer cells and inhibits tumor growth in mouse xenografts.

Physical and Chemical Properties:

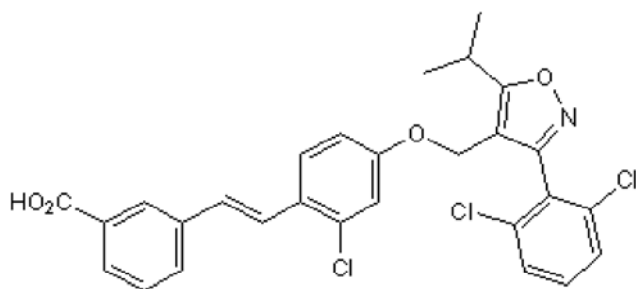
Batch Molecular Formula: C₂₈H₂₂Cl₃NO₄.

Batch Molecular Weight: 542.84

Physical Appearance: White solid

Minimum Purity: ≥97%

Batch Molecular Structure:



References:

Liu et al (2018) GW4064 attenuates lipopolysaccharide induced hepatic inflammation and apoptosis through inhibition of the Toll like receptor 4 mediated p38 mitogen activated protein kinase signalling pathway in mice. *Int.J.Mol.Med.* **41** 1455. PMID: 29328388.

Giordano et al (2016) Activated FXR inhibits leptin signaling and counteracts tumor-promoting activities of cancer-associated fibroblasts in breast malignancy. *Sci.Rep.* **2** 21782. PMID: 26899873.

Lee et al (2014) Nutrient-sensing nuclear receptors coordinate autophagy. *Nature* **516** 112. PMID: 25383539.

Storage: Store at +4°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

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.

Licensing Information:

Sold for research purposes under agreement from GlaxoSmithKline

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