

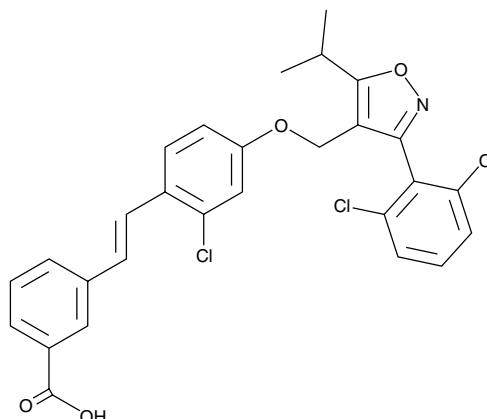
# Product Information



## GW 4064

Item No. 10006611

**CAS Registry No.:** 278779-30-9  
**Formal Name:** 3-[2-[2-chloro-4-[[3-(2,6-dichlorophenyl)-5-(1-methylethyl)-4-isoxazolyl]methoxy]phenyl]ethenyl]-benzoic acid  
**MF:** C<sub>28</sub>H<sub>22</sub>Cl<sub>3</sub>NO<sub>4</sub>  
**FW:** 542.8  
**Purity:** ≥95%  
**Stability:** ≥2 years at -20°C  
**Supplied as:** A crystalline solid  
**UV/Vis.:** λ<sub>max</sub>: 304 nm



### Laboratory Procedures

For long term storage, we suggest that GW 4064 be stored as supplied at -20°C. It should be stable for at least two years.

GW 4064 is supplied as a crystalline solid. A stock solution may be made by dissolving the GW 4064 in the solvent of choice. GW 4064 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of GW 4064 in ethanol is approximately 1 mg/ml and approximately 25 mg/ml in DMSO and DMF.

GW 4064 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, GW 4064 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. GW 4064 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Farnesoid X receptor (FXR) is a nuclear receptor that acts as a bile acid sensor, protecting cells and organs against bile acid toxicity.<sup>1</sup> GW 4064 is a selective agonist of FXR (EC<sub>50</sub> = 15 nM).<sup>2</sup> It displays no activity at other nuclear receptors, including the retinoic acid receptor, at concentrations up to 1 μM.<sup>2</sup> GW 4064 is used to elucidate the role of FXR in dyslipidemia, diabetes, obesity, and cancer.<sup>3-7</sup>

### References

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3. Haeusler, R.A., Pratt-Hyatt, M., Welch, C.L., *et al.* Impaired generation of 12-hydroxylated bile acids links hepatic insulin signaling with dyslipidemia. *Cell Metab.* **15(1)**, 65-74 (2012).
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6. Catalano, S., Malvindi, R., Giordano, C., *et al.* Farnesoid X receptor, through the binding with steroidogenic factor 1-responsive element, inhibits aromatase expression in tumor Leydig cells. *J. Biol. Chem.* **285(8)**, 5581-5593 (2010).
7. Cariou, B., van Harmelen, K., Duran-Sandoval, D., *et al.* The farnesoid X receptor modulates adiposity and peripheral insulin sensitivity in mice. *J. Biol. Chem.* **281(16)**, 11039-11049 (2006).

### Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/10006611](http://www.caymanchem.com/catalog/10006611)

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

#### 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 Safety Data Sheet, which has been sent via email to your institution.

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