

# PRODUCT INFORMATION



**GW 7647**

Item No. 10008613

**CAS Registry No.:** 265129-71-3  
**Formal Name:** 2-[[4-[2-[[[(cyclohexylamino) carbonyl](4-cyclohexylbutyl) amino]ethyl]phenyl]thio]-2-methyl-propanoic acid

**MF:** C<sub>29</sub>H<sub>46</sub>N<sub>2</sub>O<sub>3</sub>S

**FW:** 502.8

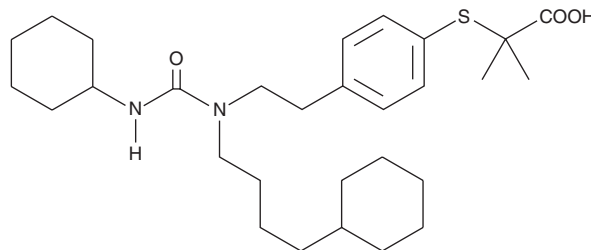
**Purity:** ≥98%

**UV/Vis.:** λ<sub>max</sub>: 230 nm

**Supplied as:** A crystalline solid

**Storage:** -20°C

**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## Laboratory Procedures

GW 7647 is supplied as a crystalline solid. A stock solution may be made by dissolving the GW 7647 in the solvent of choice. GW 7647 is soluble in the organic solvent DMSO, which should be purged with an inert gas, at a concentration of approximately 15 mg/ml.

## Description

Peroxisome proliferator-activated receptor α (PPARα) is a ligand-activated transcription factor involved in the regulation of lipid homeostasis.<sup>1,2</sup> Activation of PPARα results in expression of a variety of genes, particularly those involved in fatty acid β-oxidation, binding, and transport.<sup>3</sup> GW 7647 is a potent, selective agonist of human and murine PPARα.<sup>4</sup> It activates human PPARα, PPARγ, and PPARδ with EC<sub>50</sub> values of 0.006, 1.1, and 6.2 μM, respectively, in a GAL4-PPAR binding assay. Similar EC<sub>50</sub> values of 0.001, 1.3, and 2.9 were observed with the murine receptors. GW 7647 lowered triglycerides 93% and 60% in fat-fed hamsters and rats, respectively, at a dose of 3 mg/kg.<sup>4</sup>

## References

1. Latruffe, N. and Vamecq, J. Peroxisome proliferators and peroxisome proliferator activated receptors (PPARs) as regulators of lipid metabolism *Biochimie* **79**, 81-94 (1997).
2. Lemberger, T., Desvergne, B., and Wahli, W. Peroxisome proliferator-activated receptors: A nuclear receptor signaling pathway in lipid physiology. *Annu. Rev. Cell Dev. Biol.* **12**, 335-363 (1996).
3. Mandard, S., Müller, M., and Kersten, S. Peroxisome proliferator-activated receptor α target genes. *Cell Mol. Life Sci.* **61**, 393-419 (2004).
4. Brown, P.J., Stuart, L.W., Hurley, K.P., et al. Identification of a subtype selective human PPARα agonist through parallel-array synthesis. *Bioorganic & Medicinal Chemistry Letters* **11**, 1225-1227 (2001).

### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 09/28/2022

## CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM