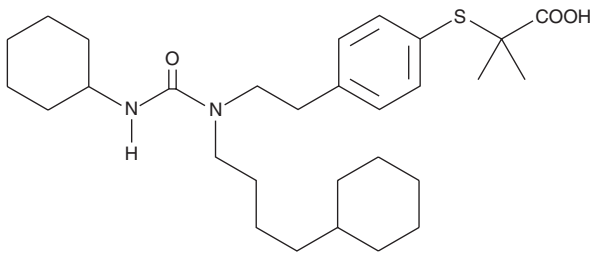
PRODUCT INFORMATION

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:	$C_{29}H_{46}N_2O_3S$
FW:	502.8
Purity:	≥98%
UV/Vis.:	λ_{max}: 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.[1,2] Activation of PPARα results in expression of a variety of genes, particularly those involved in fatty acid β-oxidation, binding, and transport.[3] GW 7647 is a potent, selective agonist of human and murine PPARα.[4] It activates human PPARα, PPARγ, and PPARδ with EC_{50} values of 0.006, 1.1, and 6.2 µM, respectively, in a GAL4-PPAR binding assay. Similar EC_{50} 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.[4]

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).

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