# **PRODUCT** INFORMATION



GW 3965 (hydrochloride)

Item No. 10054

CAS Registry No. Formal Name:	: 405911-17-3 3-[3-[[[2-chloro-3-(trifluoromethyl) phenyl]methyl](2,2-diphenylethyl) amino]propoxy]-benzeneacetic acid, monohydrochloride	HO	
MF:	$C_{33}H_{31}CIF_{3}NO_{3} \bullet HCI$	HU · · U	~ N
FW:	618.5		
Purity:	≥98%	• HCI	
Stability:	≥2 years at -20°C		
Supplied as:	A crystalline solid		
UV/Vis.:	λ <sub>max</sub> : 204, 272 nm		ĊF <sub>3</sub>

## Laboratory Procedures

For long term storage, we suggest that GW 3965 (hydrochloride) be stored as supplied at -20°C. It should be stable for at least two years.

GW 3965 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the GW 3965 (hydrochloride) in the solvent of choice. GW 3965 (hydrochloride) 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 3965 (hydrochloride) in ethanol is approximately 2 mg/ml and approximately 20 mg/ml in DMSO and DMF.

GW 3965 (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, GW 3965 (hydrochloride) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. GW 3965 (hydrochloride) has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

## Description

The liver X receptors, LXR $\alpha$  and LXR $\beta$ , are nuclear receptors that act as ligand-dependent transcription factors.<sup>1</sup> They modulate cholesterol, fatty acids, and glucose homeostasis. GW 3965 is an orally-active agonist of LXR $\alpha$  and LXR $\beta$ , activating the human isoforms with EC<sub>50</sub> values of 190 and 30 nM, respectively.<sup>2</sup> It alters LXR-regulated gene expression in mice and rats, affecting pathways related to glucose and lipid metabolism.<sup>2-4</sup> GW 3965 also affects inflammation and pressor responses through LXR $\alpha$  and LXR $\beta$ .<sup>5-7</sup>

## References

- 1. Gabbi, C., Warner, M., and Gustafsson, J.-Ä. Biochem. Biophys. Res. Commun. (2013).
- 2. Collins, J.L., Fivush, A.M., Watson, M.A., et al. J. Med. Chem. 45, 1963-1966 (2002).
- 3. Joseph, S.B., McKilligin, E., Pei, L., et al. Proc. Natl. Acad. Sci. USA 99(11), 7604-7609 (2002).
- 4. Hazra, S., Rasheed, A., Bhatwadekar, A., et al. Diabetes 61(12), 3270-3279 (2012).
- 5. Joseph, S.B., Castrillo, A., Lafitte, B.A., et al. Nat. Med. 9(2), 213-219 (2003).
- 6. Leik, C.E., Carson, N.L., Hennan, J.K., et al. Br. J. Pharmacol. 151(4), 450-456 (2007).
- 7. Archer, A., Stolarczyk, É., Doria, M.L., et al. J. Lipid Res. 54(5), 1300-1311 (2013).

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

### SAFFTY DATA

al 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, 08/10/2015

## 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