

## Catalog #10-3069 GW3965 HCI

CAS# 405911-17-3

3-[3-[[[2-Chloro-3-(trifluoromethyl)phenyl]methyl](2,2-diphenylethyl)amino]propoxy]-benzeneacetic acid, hydrochloride

Lot # E105247

GW3965 is a potent and selective LXR agonist, activating human LXRα and β in cell-based reporter gene assays (EC<sub>50</sub>=190 and 30 nM respectively).¹ Since LXR is a master regulator of cholesterol and fatty acid metabolism, GW3965 exerts a variety of effects including antiatherosclerotic², antiinflammatory³ as well as antinociceptive⁴ and alteration of fat tissue distribution⁵. Orally active.

- 1) Collins et al. (2002), Identification of a nonsteroidal liver X receptor agonist through parallel array synthesis of tertiary amines; J.Med.Chem. **45** 1963
- 2) Blaschke et al. (2006), A nuclear receptor corepressor-dependent pathway mediates suppression of cytokine-induced C-reactive protein gene expression by liver X receptor, Nature **99** e88
- 3) Schulman et al. (2017), Liver X Receptors Link Lipid Metabolism and Inflammation; FEBS Lett. 591 2978
- 4) Hullugundi et al. (2024), Cholesterol-dependent LXR transcription factor activity represses pronociceptive effects of estrogen in sensory neurons and pain induced by myelin basic protein fragments; Brain Behav. Immun. Health 38 100757
- 5) Archer et al. (2013), LXR activation by GW3965 alters fat tissue distribution and adipose tissue inflammation in ob/ob female mice; J. Lipid Res. **54** 1300

## **PHYSICAL DATA**

Molecular Weight: 618.52

Solubility:

Molecular Formula: C<sub>33</sub>H<sub>31</sub>CIF<sub>3</sub>NO<sub>3</sub>·HCl Purity: >98% (HPLC)

NMR: (Conforms)
DMSO (48 mg/mL)

Physical Description: White solid

Storage and Stability: Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in

DMSO may be stored at -20°C for up to 2 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.

Focus Biomolecules LLC 400 Davis Drive, Suite 600 Plymouth Meeting PA 19462

www.focusbiomolecules.com