

Catalog # 10-3361 T0901317

293754-55-9

N-(2,2,2-Trifluoroethyl)-N-[4-[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]phenyl]-benzenesulfonamide Lot # X103457

A potent high affinity liver X receptor (LXR α and β) agonist, EC₅₀~50 nM.¹ Upregulates expression of ABCA1, a reverse cholesterol transporter, resulting in inhibition of cholesterol absorption. Inverse agonist at CAR.² T0901317 was also shown to be an FXR agonist at lower potency than LXR thus appropriate controls must be employed when using this compound as a pharmacological tool.³ Decreases amyloid beta production in a mouse model of Alzheimer's disease.⁴ Inhibits cellular senescence in endothelial cells.⁵

- 1) Repa et al. (2000), Regulation of absorption and ABC1-mediated efflux of cholesterol by RXR heterodimers; Science, 289 1524
- 2) Kanno et al. (2013) T0901317, a potent LXR agonist, is an inverse agonist of CAR; J. Toxicol. Sci., 38 309
- 3) Houck et al. (2004) T0901317 is a dual LXR/FXR agonist, Mol. Genet. Metab., 83 4079
- 4) Koldamova et al. (2005) The liver X receptor ligand T0901317 decreases amyloid beta production in vitro and in a mouse model of Alzheimer's disease; J. Biol. Chem., **280** 4079
- 5) Hayashi et al. (2014) Endothelial cellular senescence is inhibited by liver X receptor activation with an additional mechanism for its atheroprotection in diabetes; Proc. Natl. Acad. Sci. USA, 111 1168

PHYSICAL DATA

Molecular Weight: 481.33

Molecular Formula: $C_{17}H_{12}F_9NO_3S$ Purity: >98% by TLC

NMR: (Conforms)

Solubility: DMSO (50 mg/ml); Ethanol (50 mg/ml)

Physical Description: White to off-white solid

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

DMSO or ethanol may be stored at -20°C for up to 1 month.

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