

Product Name: T 0901317

Catalog No.: 2373

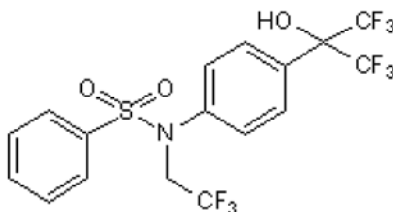
Batch No.: 2

CAS Number: 293754-55-9

IUPAC Name: *N*-(2,2,2-Trifluoroethyl)-*N*-[4-[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]phenyl]benzenesulfonamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₇H₁₂F₉NO₃S
Batch Molecular Weight: 481.33
Physical Appearance: White solid
Solubility: DMSO to 100 mM
 ethanol to 100 mM
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.5% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

| | Carbon | Hydrogen | Nitrogen |
|-------------|--------|----------|----------|
| Theoretical | 42.42 | 2.51 | 2.91 |
| Found | 42.17 | 2.42 | 2.78 |

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

Potent, high affinity liver X receptor (LXR) agonist (EC₅₀ ~ 50 nM, K_d values are 7 and 22 nM for LXR-α and LXR-β respectively). Upregulates expression of the ABCA1 gene associated with cholesterol efflux regulation and HDL metabolism. Decreases amyloid-β production in primary neurons in vitro. Displays an EC₅₀ of ~ 5 μM for activation of bile acid farnesoid X receptors (FXRs); 10-fold more potent than natural FXR ligand chenodeoxycholic acid. Also exhibits inverse agonist activity at constitutive androstane receptors (CAR).

Physical and Chemical Properties:

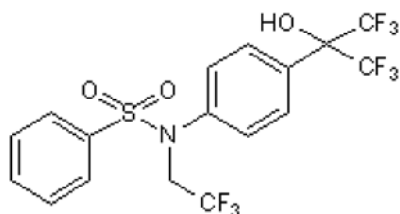
Batch Molecular Formula: C₁₇H₁₂F₉NO₃S

Batch Molecular Weight: 481.33

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Kanno et al (2013) T0901317, a potent LXR agonist, is an inverse agonist of CAR. *J.Toxicol.Sci.* **38** 309. PMID: 23665929.

Mitro et al (2007) The nuclear receptor LXR is a glucose sensor. *Nature Lett.* **445** 219.

Koldamova et al (2005) The liver X receptor ligand T0901317 decreases amyloid β production *in vitro* and in a mouse model of Alzheimer's disease. *J.Biol.Chem.* **280** 4079. PMID: 15557325.

Houck et al (2004) T0901317 is a dual LXR/FXR agonist. *Mol.Gen.Metab.* **83** 184.

Repa et al (2000) Regulation of absorption and ABC1-mediated efflux of cholesterol by RXR heterodimers. *Science* **289** 1524. PMID: 10968783.

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