

Product Specification Sheet

Product Name: GW501516

Catalog Number: C4950

Technical information:

Chemical Formula: $C_{21}H_{18}F_3NO_3S_2$

CAS #: 317318-70-0

Molecular Weight: 453.5

Purity: > 98%

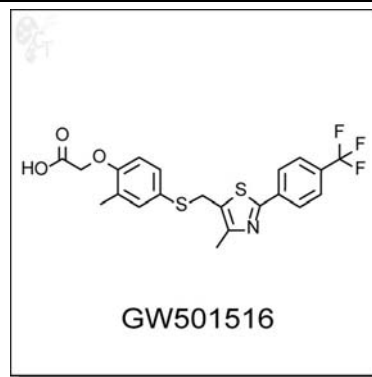
Appearance: white solid

Solubility: Soluble in DMSO up to 22 mM

Chemical Name: 2-(2-methyl-4-((4-methyl-2-(4-(trifluoromethyl)phenyl)thiazol-5-yl)methylthio)phenoxy)acetic acid

Storage: Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.

Shelf Life: In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.



- Handling:**
- To make 10 mM stock solution, add 0.221 mL of DMSO for each mg of GW501516.
 - For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

Biological Activity: GW501516 is a selective PPAR δ agonist with a K_i affinity of 1.1 nM in a human binding assay. In a cell-based transfection assay, GW501516 induces expression of GAL4-responsive reporter gene at an EC₅₀ of 1.2 nM. At doses up to 1 μ M, GW501516 does not promote adipocyte differentiation, bind to RXR α , or have activity toward other nuclear or non-nuclear receptors. (1) GW501516 increases expression of the reverse cholesterol transporter ATP-binding cassette A1 and induces apolipoprotein A1-specific cholesterol efflux. (1)

GW501516 is also reported to be a PPAR β agonist with anti-inflammatory activity and decreases IFN- γ -induced upregulation of TNF- α and iNOS. Concurrently, GW501516 increase IL-6 mRNA expression. (2)

- Reference:**
1. Oliver et al., A selective peroxisome proliferator-activated receptor δ agonist promotes reverse cholesterol transport. Proc. Nat'l. Acad. Sci. 2001, 98(9), 5306-5311. Pubmed ID: 11309497
 2. Defaux et al., Effects of the PPAR- β agonist GW501516 in an in vitro model of brain inflammation and antibody-induced demyelination. J. Neuroinflammation, 2009, 6, 15-27. Pubmed ID: 19422681

To reorder: <http://www.cellagentech.com/GW501516/>

For Technical Support: technical@cellagentech.com

Chemicals are sold for research use only, not for clinical or diagnostic use.