

Product Datasheet

GW 501516 (orb1225321)

Catalog Number	orb1225321
Category	Small Molecules
Description	A potent and subtype-selective PPARδ agonist with K_i of 1.1 nM in human PPARδ binding assay; displays >1,000-fold selectivity over other PPAR subtypes; increases expression of the reverse cholesterol transporter ATP-binding cassette A1 and induces apolipoprotein A1-specific cholesterol efflux in macrophages, fibroblasts, and intestinal cells. Dyslipidemia Phase 2 Discontinued (In Vitro): GW 501516 is shown to be the most potent and selective PPARδ agonists known with an EC$_{50}$ of 1.1 nM against PPARδ and 1000-fold selectivity over the other human subtypes, PPARα and γ. GW 501516 exerts anti-inflammatory effects in mouse cultured proximal tubular (mProx) cells. GW 501516 inhibits palmitate- and TNFα-induced increases in MCP-1 mRNA expression in a dose-dependent manner. (In Vivo): GW 501516 causes impaired bone formation, leading to decreased BMD and deterioration of bone properties in OVX rats. GW 501516 attenuates interstitial inflammation and proximal tubular cell damage in a protein-overload mouse nephropathy model. GW 501516 treatment enhances running endurance and the proportion of succinate dehydrogenase (SDH)-positive muscle fibres in both trained and untrained mice.
Target	PPAR
Purity	>98% (HPLC)
MW	453.4977
Target Areas	PPAR δ
Solubility (25°C)	10 mM in DMSO
CAS Number	317318-70-0
Formula	$C_{21}H_{18}F_3NO_3S_2$

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SMILES	<chem>O=C(O)COC1=CC=C(SCC2=C(C)N=C(C3=CC=C(C(F)(F)F)C=C3)S2)C=C1C</chem>
Chemical Name	Acetic acid, 2-[2-methyl-4-[[[4-methyl-2-[4-(trifluoromethyl)phenyl]-5-thiazolyl]methyl]thio]phenoxy]-
Storage	Storage temperature: -20°C. Stability: ≥ 2 years
Note	For research use only
Expiration Date	12 months from date of receipt.

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