

产品名称 : Tetradecylthioacetic acid

同义词 : ——

产品货号 : M28915

CAS Number : 2921-20-2

分子式 : C₁₆H₃₂O₂S

分子量 : 288.49

化学全名 : ——

产品描述 : Tetradecylthioacetic acid is a synthetic fatty acid with a sulfur substitution in the β -position. This modification renders TTA unable to undergo complete β -oxidation and increases its biological activity, including activation of peroxisome proliferator activated receptors (PPARs) with preference for PPAR α . (In Vivo): Mice receiving HFD supplemented with 0.75% (w/w) TTA had significantly lower body weights compared to mice fed the diet without TTA. Plasma triacylglycerol (TAG) was reduced 3-fold with TTA treatment, concurrent with increase in liver TAG. Total cholesterol was unchanged in plasma and liver. However, TTA promoted a shift in the plasma lipoprotein fractions with an increase in larger HDL particles. Histological analysis of the small intestine revealed a reduced size of lipid droplets in enterocytes of TTA treated mice, accompanied by increased mRNA expression of fatty acid transporter genes. Expression of the cholesterol efflux pump Abca1 was induced in the small intestine, but not in the liver. Scd1 displayed markedly increased mRNA and protein expression in the intestine of the TTA group.

通路 : Metabolic Enzyme/Protease

靶点 : PPAR

受体 : ——

溶解度 : In Vitro: ?DMSO : ≥ 2 mg/mL (6.93 mM)

SMILES : CCCCCCCCCCCCCCSCC(O)=O

存储条件 : (-20°C)

稳定性 : ≥ 2 years

参考文献 :

1.EUBULUS BIOTHERAPEUTICS - WO2021/183702, 2021, A1.