
CMPF

产品编号: D62038

CAS: 86879-39-2

分子式: C₁₂H₁₆O₅

纯度: 98%

InChi Key: InChIKey=WMCQWXZMVIETAO-UHFFFAOYSA-N

Smiles: O=C(O)C1=C(OC(=C1C)CCC)CCC(=O)O

外观: 固体粉末

作用通路: Cytoskeletal Signaling

作用靶点: Microtubule Associated

溶解性: Soluble in DMSO、Ethanol、DMF

保存条件: -20°C

产品介绍: Furan fatty acids are unique, naturally occurring lipids that are found in significant amounts in dietary phospholipids, such as in salmon roe. CMPF is an endogenous metabolite of furan fatty acids in humans. CMPF is highly albumin-bound and accumulates in the serum of uremic patients to concentrations in excess of 0.2 mM. Its primary effect is to inhibit cellular transport and subsequent deiodination of thyroxine (T₄). CMPF is tightly bound to albumin but only moderately inhibits T₄ binding in a direct manner (10-14% at 0.3 mM). However, CMPF effectively displaces competitive T₄ binding molecules from albumin, such as acidic drugs and free fatty acids. Therefore, CMPF may indirectly influence T₄ binding to albumin by increasing the serum concentration of competitive binding molecules, particularly free fatty acids such as oleic acid.