For Research Use Only

Lauric Acid

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Catalog Number: CM00674

产品信息

Catalog Number:
CM00674

CAS号:
143-07-7

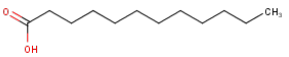
分子式:
$C_{12}H_{24}O_2$

主要靶点:
Antibacterial|Endogenous Metabolite|Others

主要通路:
代谢|微生物学

分子量:
200.32

溶解度:
H2O:16 mg/mL (79.87 mM);Ethanol:38 mg/mL (189.7 mM);DMSO:45 mg/mL (224.64 mM)



靶点活性

S. epidermidis:4 μg/mL(EC50)|S. aureus:6 μg/mL(EC50)|P. acnes:2 μg/mL(EC50)

体外活性

Lauric acid在Caco-2细胞（p<0.05）和IEC-6细胞（p<0.05）中诱导凋亡。在Caco-2细胞中，Lauric acid降低了GSH的可用性并且与丁酸比较，产生了更多的ROS（p < 0.05）。Lauric acid使得Caco-2和IEC-6细胞在G0/G1期的数量减少，同时在S期和G2/M期阶段停滞。与丁酸相比，Lauric acid在IEC-6细胞中诱导了凋亡（p < 0.05），并引起了高水平的ROS[1]。

细胞实验

Cell lines are harvested by enzymatic dissociation and seeded into 24-well tissue culture plates at 2.5 × 105 and 1.5 × 105 cells/ml, respectively. After 24 h of incubation, the medium is replaced with 1 ml of complete DMEM containing freshly prepared (50 mM)Lauric acid, conjugated to 0.4% FAF-BSA to final concentrations of 0.1, 0.3, 0.5 and 1 mM and compared to NaB (5 mM) with 50 μl of 0.4% FAF-BSA as a vehicle control and incubated in a humidified atmosphere at 37℃ in 5% CO2 and, after enzymatic dissociation, assayed at 24, 48, 72, and 96 h. All experimental studies are undertaken in triplicate and measured in duplicate. (Only for Reference)

储存

Powder: -20°C for 3 years | In solvent: -80°C for 1 year | Shipping with blue ice.