

Product Data Sheet

Product Name: PF-06649298

Cat. No.: GC66038

Chemical Properties

Cas. No. 1854061-16-7

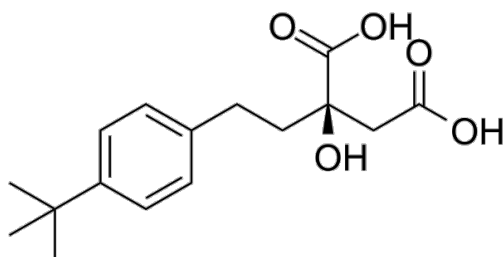
Formula $C_{16}H_{22}O_5$ M.Wt 294.34

Solubility DMSO : 100 mg/mL (339.74 mM; Storage Store at -20°C
Need ultrasonic)

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure



Background

Caution: Product has not been fully validated for medical applications. For research use only.

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IC₅₀: 408 nM (citrate uptake in HEK_{NaCT}), 16.2 μM (citrate uptake in Human Heps), 4.5 μM (citrate uptake in Mouse Heps), ??100 μM (citrate uptake in HEK_{NaCD1}), ??100 μM (citrate uptake in HEK_{NaCD3})^{[1][2]}

PF-06649298 is a **sodium-coupled citrate transporter (NaCT or SLC13A5)** inhibitor. PF-06649298 specifically interacts with NaCT with an **IC₅₀** value of 16.2 μM to inhibits the transport of citrate in human hepatocytes. PF-06649298 can be used for the research of regulating glucose metabolism and lipid metabolism^{[1][2]}.

PF-06649298 (0-100 μM; 30 min) inhibits citrate uptaken in cells^[1].

Cell Viability Assay^[1]

Cell Line: HEK-293 cells expressing NaCT, NaDC1 or NaDC3, human hepatocytes and mouse epatocytes

Concentration: 0-100 μM

Incubation Time: 30 min

Result: Showed a selectivity for NaCT over the dicarboxylate transporters NaDC1 and NaDC3. Inhibited citrate uptake in HEK-293 cells expressing NaCT, NaDC1 or NaDC3, human hepatocytes and mouse epatocytes with IC₅₀s of 408 nM, ??100 μM, ??100 μM, 16.2 μM and 4.5 μM, respectively.

PF-06649298 (250 mg/kg; p.o. twice a day; for 21 days) reverses glucose intolerance of high fat diet (HFD) mice^[2].

Animal Model: Mice with high fat diet (HFD) administration^[2]

Dosage: 250 mg/kg

Administration: Oral gavage; 250mg/kg twice a day; for 21 days

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Result: Decreased plasma glucose, hepatic triglycerides, diacylglycerides, and acyl-carnitines concentration of livers in HFD mice. Totally reversed glucose intolerance of HFD mice.

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