

Catalog Number: CM03649

## 产品信息

**Catalog Number:**  
CM03649

**CAS号:**  
95809-78-2

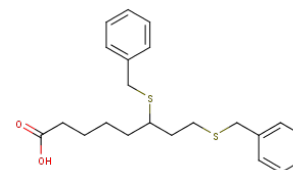
**分子式:**  
C<sub>22</sub>H<sub>28</sub>O<sub>2</sub>S<sub>2</sub>

**主要靶点:**  
Apoptosis|Dehydrogenase|Mitochondrial  
Metabolism

**主要通路:**  
代谢|凋亡

**分子量:**  
388.59

**溶解度:**  
DMSO:78 mg/mL (200.72  
mM),Ethanol:78 mg/mL (200.72  
mM),H<sub>2</sub>O:<1 mg/mL



## 体外活性

In vitro, CPI-613 produces the selective toxicity against several tumor cell lines including H460 human lung cancer cells and Saos-2 human sarcoma cells with EC<sub>50</sub> of 120 μM and 120 μM, respectively. CPI-613 disrupts H460 cancer cell mitochondrial metabolism including inhibition of PDH complex activity and loss of mitochondrial membrane potential in a time- and drug dose-dependent fashion. In addition, CPI-613 (240 μM) also induces both apoptotic and non-apoptotic cell death in H460 human lung cancer and Saos-2 human sarcoma cells. [1]

## 体内活性

CPI-613 (25 mg/kg) has potent anticancer activity in a human tumor xenograft model of a pancreatic tumor cell (BxPC-3). Similarly, CPI-613 (10 mg/kg) also produces significant tumor growth inhibition of H460 human non-small cell lung carcinoma in mouse model. Besides, CPI-613 produces little or no side-effect toxicity in expected therapeutic dose ranges in large animal models and has the maximum tolerated dose of 100 mg/kg in mice. [1]

## 描述

CPI-613, a lipoyl-CoA analog, inhibits mitochondrial enzymes pyruvate dehydrogenase (PDH) and α-ketoglutarate dehydrogenase, disrupts tumor cell mitochondrial metabolism. It has potential chemopreventive and antineoplastic activities, and has been used in trials studying the treatment of Cancer, Lymphoma, Solid Tumors, Advanced Cancer, and Pancreatic Cancer, among others.

## 储存

Powder: -20°C for 3 years | In solvent: -80°C for 2 years