For Research Use Only

D-II-Hydroxyglutaric acid disodium



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Catalog Number: CM00197

产品信息

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CAS号:

103404-90-6

分子式: C₅H₆Na₂O₅

mTOR|ATPase|Endogenous Metabolite|Reactive Oxygen Species|Others

· <mark>主要通路:</mark> NF- ^K B信号通路|免疫与炎症|离子 通道|PI3K/Akt/mTOR信号通路|代 谢|其他

靶点活性

α -ketoglutarate-dependent dioxygenases:0.628 mM(Ki)

体外活性

In U-87 mg cells, (R)-2-Hydroxyglutarate acts as weak antagonists of α -KG to inhibit α -KG-dependent histone demethylases and increases dimethylation on both H3K9 and H3K79. [1] Besides, (R)-2-Hydroxyglutarate inhibits ATP synthase and mTOR signaling, and thus causes growth arrest and tumor cell killing. [2]

192.08

溶解度:

DMSO:2.5 mM

细胞实验

Cells are seeded in 12-well plates and, after overnight incubation, treated with the indicated concentrations of each compound. After harvesting, cells are stained with acridine orange (AO) and 4′, 6-diamidino-2-phenylindole (DAPI). Cell number and viability are measured based on AO and DAPI fluorescence as measured by NC3000 following the manufacturer's instructions.(Only for Reference)

D- α -Hydroxyglutaric acid disodium (Disodium (R)-2-Hydroxyglutarate) is a competitive inhibitor of α -ketoglutarate-dependent dioxygenases with Ki of 0.628 mM.

储存

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