ATP Citrate Lyase

ACLY

ATP-citrate lyase (ACLY) is a central metabolic enzyme and catalyses the ATP-dependent conversion of citrate and coenzyme A (CoA) to oxaloacetate and acetyl-CoA. The acetyl-CoA product is crucial for the metabolism of fatty acids, the biosynthesis of cholesterol, and the acetylation and prenylation of proteins. Acetyl CoA is also required for acetylation reactions that modify proteins, such as histone acetylation. ACLY is upregulated or activated in several types of cancers, and its inhibition is known to induce proliferation arrest in cancer cells both in vitro and in vivo.

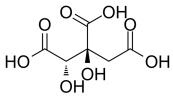
ACLY links glucose and lipid metabolism by catalyzing the formation of acetyl-CoA and oxaloacetate from citrate produced by glycolysis in the presence of ATP and CoA. ACLY is aberrantly expressed in many immortalized cells and tumors, such as breast, liver, colon, lung and prostate cancers, and is correlated reversely with tumor stage and differentiation, serving as a negative prognostic marker. ACLY is an upstream enzyme of the long chain fatty acid synthesis, providing acetyl-CoA as an essential component of the fatty acid synthesis. Therefore, ACLY is a key enzyme of cellular lipogenesis and potent target for cancer therapy.

ATP Citrate Lyase Inhibitors

(-)-Hydroxycitric acid
(Garcinia acid)

Cat. No.: HY-16007

(-)-Hydroxycitric acid (Garcinia acid) is the principal acid of fruit rinds of Garcinia cambogia. (-)-Hydroxycitric acid is a potent and competitive inhibitor of **ATP citrate lyase**.

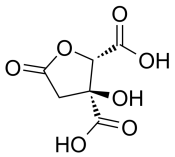


Purity: 98.11%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg

(-)-Hydroxycitric acid lactone
(Garcinia lactone)

Cat. No.: HY-N7347

(-)-Hydroxycitric acid lactone (Garcinia lactone) is an anti-obesity agent and a popular weight loss food supplement. (-)-Hydroxycitric acid lactone is a potent inhibitor of **ATP-citrate lyase**.

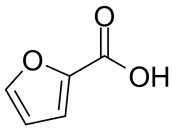


Purity: ≥97.0%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

2-Furoic acid
(Furan-2-carboxylic acid)

Cat. No.: HY-W012946

2-Furoic acid (Furan-2-carboxylic acid) is an organic compound produced through furfural oxidation. 2-Furoic acid exhibits hypolipidemic effet, lowers both serum cholesterol and serum triglyceride levels in rats.

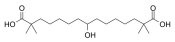


Purity: ≥98.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 100 mg

Bempedoic acid
(ETC-1002; ESP-55016)

Cat. No.: HY-12357

Bempedoic acid (ETC-1002) is an **ATP-citrate lyase (ACL)** inhibitor. Bempedoic acid (ETC-1002) activates **AMPK**.

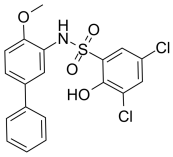


Purity: ≥98.0%
Clinical Data: Launched
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

BMS-303141

Cat. No.: HY-16107

BMS-303141 is a potent, cell-permeable ATP-citrate lyase (**ACL**) inhibitor with an IC_{50} of 0.13 μM.

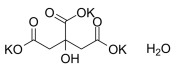


Purity: 98.71%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

Hydroxycitric acid tripotassium hydrate
(Potassium citrate monohydrate)

Cat. No.: HY-W009156

Hydroxycitric acid tripotassium hydrate (Potassium citrate monohydrate) is the major active ingredient of Garcinia cambogia and a derivative of citric acid. Hydroxycitric acid tripotassium hydrate competitively inhibits **ATP citrate lyase** with weight loss benefits.

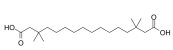


Purity: ≥99.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 500 mg

MEDICA16

Cat. No.: HY-P1123

MEDICA16, an **ATP-citrate lyase** inhibitor, significantly reduces intracellular TG content in gastrocnemius muscle, and this reduction is accompanied by an increase in insulin sensitivity. MEDICA16 is a selective agonist for **GPR40** as well as selective partial agonists for **GPR120**.

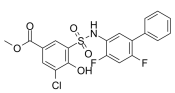


Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg

NDI-091143

Cat. No.: HY-127111

NDI-091143 is a potent and high-affinity **human ATP-citrate lyase (ACLY)** inhibitor with an IC_{50} of 2.1 nM (ADP-Glo assay), a K_i of 7.0 nM and a K_d of 2.2 nM.

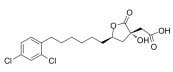


Purity: 99.94%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

SB 204990

Cat. No.: HY-16450

SB 204990 is a potent and specific inhibitor of ATP citrate lyase **(ACLY)** enzyme.



Purity: 99.50%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg