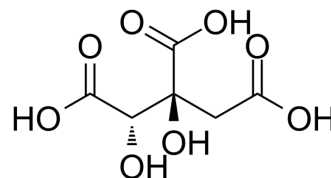


## (-)-Hydroxycitric acid

Cat. No.:	HY-16007		
CAS No.:	27750-10-3		
Molecular Formula:	C <sub>6</sub> H <sub>8</sub> O <sub>8</sub>		
Molecular Weight:	208.12		
Target:	ATP Citrate Lyase		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

H<sub>2</sub>O : 5 mg/mL (24.02 mM; ultrasonic and warming and adjust pH to 4 with HCl and heat to 60°C)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	4.8049 mL	24.0246 mL	48.0492 mL
5 mM	0.9610 mL	4.8049 mL	9.6098 mL
10 mM	0.4805 mL	2.4025 mL	4.8049 mL

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

(-)-Hydroxycitric acid (Garcinia acid) is the principal acid of fruit rinds of *Garcinia cambogia*. (-)-Hydroxycitric acid is a potent and competitive and orally active inhibitor of ATP citrate lyase. (-)-Hydroxycitric acid suppresses the fatty acid synthesis, lipogenesis, food intake, and induced weight loss<sup>[1][2]</sup>.

#### In Vitro

(-)-Hydroxycitric acid (0-50 μM) reduces lipid droplets accumulation, and decreases ATP-citrate lyase, fatty acid synthase and sterol regulatory element binding protein-1c mRNA level in primary chicken hepatocytes<sup>[4]</sup>.  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### In Vivo

(-)-Hydroxycitric acid (1.0 mg/kg embryos, injection) reduces lipid droplets accumulation, triglyceride content, lipogenesis factors mRNA level and increases lipolysis factors mRNA expression in chicken embryos<sup>[3]</sup>.  
(-)-Hydroxycitric acid (p.o., once) shows a LD50 of greater than 5000 mg/kg in fasted male and female Albino rats<sup>[5]</sup>.  
(-)-Hydroxycitric acid (1000-3000 mg/kg diet for 8 weeks) reduces body weight gain, increases feed conversion ratio, and promotes protein synthesis in rats<sup>[6]</sup>.  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## REFERENCES

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- [6]. Hayamizu K, et al. Effects of garcinia cambogia (Hydroxycitric Acid) on visceral fat accumulation: a double-blind, randomized, placebo-controlled trial. *Curr Ther Res Clin Exp*. 2003 Sep;64(8):551-67.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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