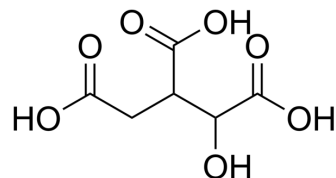


## Isocitric acid

<b>Cat. No.:</b>	HY-113228		
<b>CAS No.:</b>	320-77-4		
<b>Molecular Formula:</b>	C <sub>6</sub> H <sub>8</sub> O <sub>7</sub>		
<b>Molecular Weight:</b>	192		
<b>Target:</b>	Endogenous Metabolite		
<b>Pathway:</b>	Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

H<sub>2</sub>O : 250 mg/mL (1302.08 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	5.2083 mL	26.0417 mL	52.0833 mL
	5 mM	1.0417 mL	5.2083 mL	10.4167 mL
	10 mM	0.5208 mL	2.6042 mL	5.2083 mL

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

### BIOLOGICAL ACTIVITY

#### Description

Isocitric acid is an endogenous metabolite present in Saliva and Cellular\_Cytoplasm that can be used for the research of Alzheimer's Disease, Lewy Body Dementia and Anoxia<sup>[1][2][3]</sup>.

#### IC<sub>50</sub> & Target

Human Endogenous Metabolite

#### In Vitro

Endogenous metabolites is defined as those that are annotated by Kyoto Encyclopedia of Genes and Genomes as substrates or products of the ~1900 metabolic enzymes encoded in our genome. It is clear in the body of literature that there are documented toxic properties for many of these metabolites<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### CUSTOMER VALIDATION

- Cell Death Dis. 2023 Aug 15;14(8):520.

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See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

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- [1]. Tsuruoka M, et al. Capillary electrophoresis-mass spectrometry-based metabolome analysis of serum and saliva from neurodegenerative dementia patients. *Electrophoresis*. 2013 Oct;34(19):2865-72.
- [2]. Zupke C, et al. Intracellular flux analysis applied to the effect of dissolved oxygen on hybridomas. *Appl Microbiol Biotechnol*. 1995 Dec;44(1-2):27-36.
- [3]. Lee N, et al. Endogenous toxic metabolites and implications in cancer therapy. *Oncogene*. 2020 Aug;39(35):5709-5720.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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