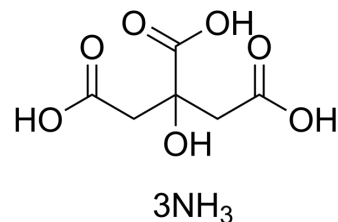


## Citric acid triammonium

<b>Cat. No.:</b>	HY-B1529A
<b>CAS No.:</b>	3458-72-8
<b>Molecular Formula:</b>	C <sub>6</sub> H <sub>17</sub> N <sub>3</sub> O <sub>7</sub>
<b>Molecular Weight:</b>	243.22
<b>Target:</b>	Endogenous Metabolite; Apoptosis
<b>Pathway:</b>	Metabolic Enzyme/Protease; Apoptosis
<b>Storage:</b>	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



### SOLVENT & SOLUBILITY

#### In Vitro

H<sub>2</sub>O : 100 mg/mL (411.15 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	4.1115 mL	20.5575 mL	41.1150 mL
	5 mM	0.8223 mL	4.1115 mL	8.2230 mL
	10 mM	0.4112 mL	2.0558 mL	4.1115 mL

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

### BIOLOGICAL ACTIVITY

#### Description

Citric acid triammonium (Triammonium citrate) is formed by [Citric acid](#) (HY-N1428) reacting with ammonia in a molar ratio of 1:3. Citric acid triammonium can be used as the carbon source to prepare carbon quantum dots (CDs). Citric acid triammonium with higher nitrogen components might promote the nitrogen-based functional groups in CDs, leading to a more efficient emission-color tunability<sup>[1][2]</sup>.

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

Human Endogenous Metabolite

### CUSTOMER VALIDATION

- Food Chem. 2022: 134807.
- New J Chem. 03 Aug 2022.

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

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## REFERENCES

- [1]. Zholobak NM, et al. Facile fabrication of luminescent organic dots by thermolysis of citric acid in urea melt, and their use for cell staining and polyelectrolyte microcapsule labelling. Beilstein J Nanotechnol. 2016 Dec 2;7:1905-1917.
- [2]. Chang Q, et al. Full Color Fluorescent Carbon Quantum Dots Synthesized from Triammonium Citrate for Cell Imaging and White LEDs. Dyes and Pigments, 2021, 193(18):109478.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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