Product Data Sheet

Citric acid triammonium

Cat. No.:	HY-B1529A
CAS No.:	3458-72-8
Molecular Formula:	$C_6H_{17}N_3O_7$
Molecular Weight:	243.22
Target:	Endogenous Metabolite; Apoptosis
Pathway:	Metabolic Enzyme/Protease; Apoptosis
Storage:	4°C, sealed storage, away from moisture
	* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)
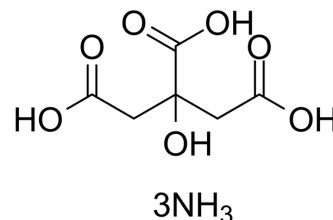
SOLVENT & SOLUBILITY

In Vitro	H_2O : 100 mg/mL (411.15 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass / Concentration	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[1][2].
IC$_{50}$ & Target	Human Endogenous Metabolite

CUSTOMER VALIDATION

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

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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.

Caution: Product has not been fully validated for medical applications. For research use only.

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