



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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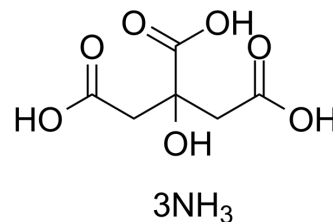
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## Citric acid triammonium

|                           |  |
|---------------------------|--|
| <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<br>* 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<br>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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