

# Certificate of Analysis

[www.tocris.com](http://www.tocris.com)

**Product Name:** Carcinine ditrifluoroacetate

**Catalog No.:** 2211

**Batch No.:** 1

**CAS Number:** 2109435-79-0

**IUPAC Name:** 3-Amino-*N*-[2-(1*H*-imidazol-4-yl)ethyl]propanamide ditrifluoroacetate

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>8</sub>H<sub>14</sub>N<sub>4</sub>O.2CF<sub>3</sub>CO<sub>2</sub>H.H<sub>2</sub>O

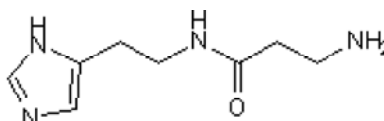
**Batch Molecular Weight:** 428.29

**Physical Appearance:** White solid

**Solubility:** water to 100 mM  
DMSO to 100 mM

**Storage:** Desiccate at RT

**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 99.4% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon Hydrogen Nitrogen		
Theoretical	33.65	4.24	13.08
Found	33.93	4.02	13.18

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

[www.tocris.com/distributors](http://www.tocris.com/distributors)

Tel: +1 612 379 2956

## Product Information

[www.tocris.com](http://www.tocris.com)

**Product Name:** Carcinine ditrifluoroacetate

**Catalog No.:** 2211

**Batch No.:** 1

**CAS Number:** 2109435-79-0

**IUPAC Name:** 3-Amino-N-[2-(1*H*-imidazol-4-yl)ethyl]propanamide ditrifluoroacetate

### Description:

Highly selective H<sub>3</sub> receptor antagonist (K<sub>i</sub> values are 0.30, 365 and 3621 µM for H<sub>3</sub>, H<sub>2</sub> and H<sub>1</sub> receptors respectively). Acts as a natural antioxidant with hydroxyl radical scavenging and lipid peroxidase activities.

### Physical and Chemical Properties:

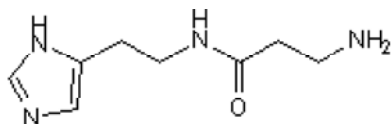
Batch Molecular Formula: C<sub>8</sub>H<sub>14</sub>N<sub>4</sub>O.2CF<sub>3</sub>CO<sub>2</sub>H.H<sub>2</sub>O

Batch Molecular Weight: 428.29

Physical Appearance: White solid

**Minimum Purity:** >98%

### Batch Molecular Structure:



**Storage:** Desiccate at RT

### Solubility & Usage Info:

water to 100 mM

DMSO to 100 mM

CAUTION - This product is hygroscopic and we recommend that it is desiccated upon arrival.

### Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

### References:

**Chen et al** (2004) Pharmacological effects of carcinine on histaminergic neurons in the brain. *Br.J.Pharmacol.* **143** 573. PMID: 15466447.

**Babizhayev et al** (1994) L-Carnosine (β-alanyl-L-histidine) and carcinine (β-alanylhistamine) act as natural antioxidants with hydroxyl-radical-scavenging and lipid-peroxidase activities. *Biochem.J.* **304** 509. PMID: 7998987.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

[www.tocris.com/distributors](http://www.tocris.com/distributors)

Tel: +1 612 379 2956