

Certificate of Analysis

www.tocris.com

Product Name: Phenamil mesylate

Catalog No.: 3379

Batch No.: 1

CAS Number: 1161-94-0

IUPAC Name: 3,5-Diamino-6-chloro-*N*-[imino(phenylamino)methyl]pyrazinecarboxamide methanesulfonate salt

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₂H₁₂ClN₇O·CH₃SO₃H·¾H₂O

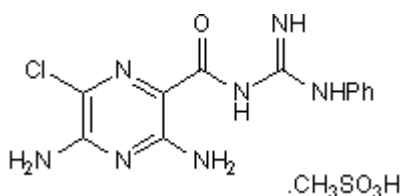
Batch Molecular Weight: 415.34

Physical Appearance: Yellow solid

Solubility: DMSO to 100 mM

Storage: Store at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.6% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

| | Carbon | Hydrogen | Nitrogen |
|-------------|--------|----------|----------|
| Theoretical | 37.75 | 4.34 | 23.35 |
| Found | 38.13 | 4.05 | 23.14 |

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

Product Name: Phenamil mesylate

Catalog No.: 3379

Batch No.: 1

CAS Number: 1161-94-0

IUPAC Name: 3,5-Diamino-6-chloro-*N*-[imino(phenylamino)methyl]pyrazinecarboxamide methanesulfonate salt

Description:

TRPP3 channel inhibitor ($IC_{50} = 0.14 \mu M$). Also inhibits epithelial Na^+ channels ($K_d = 0.4 nM$ for a high affinity site on the epithelial Na^+ channel). Derivative of amiloride (Cat. No. 0890).

Physical and Chemical Properties:

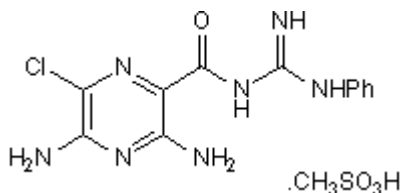
Batch Molecular Formula: $C_{12}H_{12}ClN_7O \cdot CH_3SO_3H \cdot \frac{3}{4}H_2O$

Batch Molecular Weight: 415.34

Physical Appearance: Yellow solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 mM

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:

Barbry et al (1989) Biochemical identification of two types of phenamil binding sites associated with amiloride-sensitive Na^+ channels. *Biochemistry*. **28** 3744. PMID: 2546581.

Dai et al (2007) Inhibition of TRPP3 channel by amiloride and analogs. *Mol.Pharmacol.* **72** 1576. PMID: 17804601.

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

Tel: +1 612 379 2956