

## Certificate of Analysis

**Product Name:** AMT hydrochloride

**Catalog No.:** 0871

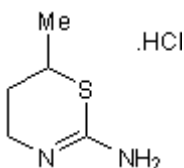
**Batch No.:** 3

CAS Number: 21463-31-0

IUPAC Name: 2-Amino-5,6-dihydro-6-methyl-4*H*-1,3-thiazine hydrochloride

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>5</sub>H<sub>10</sub>N<sub>2</sub>S.HCl  
**Batch Molecular Weight:** 166.67  
**Physical Appearance:** White solid  
**Solubility:** water to 10 mM  
**Storage:** Desiccate at +4°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.25 (Dichloromethane:Methanol [1:4])  
**Melting Point:** Between 147 - 149°C  
**<sup>1</sup>H NMR:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen	
Theoretical	36.03	6.65	16.81	0 0 0
Found	35.92	6.68	16.67	0 0 0

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

## Product Information

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

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IUPAC Name: 2-Amino-5,6-dihydro-6-methyl-4H-1,3-thiazine hydrochloride

**Description:**

Potent, selective and reversible inhibitor of iNOS (IC<sub>50</sub> = 3.6 nM; approximately 30 and 40 times selective over nNOS and eNOS respectively).

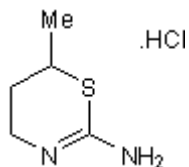
**Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>5</sub>H<sub>10</sub>N<sub>2</sub>S.HCl

Batch Molecular Weight: 166.67

Physical Appearance: White solid

**Batch Molecular Structure:**



**Storage:** Desiccate at +4°C

**Solubility & Usage Info:**

water to 10 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:**

**Nakane et al** (1995) Novel potent and selective inhibitors of inducible nitric oxide synthase. *Mol.Pharmacol.* **47** 831. PMID: 7536889.

**Yu et al** (2005) Inhibition of sarcoplasmic reticular function by chronic interleukin-6 exposure via iNOS in adult ventricular myocytes. *J.Physiol.* **566** 327. PMID: 15845578.

**Liao et al** (2006) Nitric oxide signaling in stretch-induced apoptosis of neonatal rat cardiomyocytes. *FASEB J.* **20** E1196. PMID: 16877524.

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