TOCRIS
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Print Date: Jan 13th 2016

Certificate of Analysis

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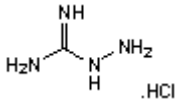
Product Name: **Aminoguanidine hydrochloride** **Catalog No.: 0787** **Batch No.: 2**
CAS Number: 1937-19-5

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $CH_6N_4.HCl$
Batch Molecular Weight: 110.55
Physical Appearance: Pale yellow solid
Solubility: water to 100 mM
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.3 (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])
Melting Point: At 168°C
^{1}H NMR: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	10.87	6.38	50.68
Found	10.85	6.39	50.31

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CAS Number: 1937-19-5

Description:

Irreversible inhibitor of iNOS that displays some selectivity over eNOS and nNOS. Exhibits antioxidant and radioprotective effects in vivo.

Physical and Chemical Properties:

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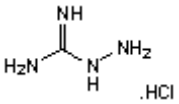

Storage: Store at RT

Solubility & Usage Info:

water 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:

Griffiths *et al* (1993) Aminoguanidine selectively inhibits inducible nitric oxide synthase. Br.J.Pharmacol. ***110*** 963. PMID: 7507781.

Laszlo *et al* (1995) Aminoguanidine inhibits both constitutive and inducible nitric oxide synthase isoforms in rat intestinal microvasculature in vivo. Eur.J.Pharmacol. ***272*** 169. PMID: 7536162.

Moore and Handy (1997) Selective inhibitors of neuronal nitric oxide synthase - is no NOS really good NOS for the nervous system? TiPS ***18*** 204. PMID: 9226999.

Huang *et al* (2009) Aminoguanidine alleviates radiation-induced small-bowel damage through its antioxidant effect. Int.J.Radiat.Oncol.Biol.Phys. ***74*** 237. PMID: 19362242.

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