

**Product Name:** MDL 72527

**Catalog No.:** 3709

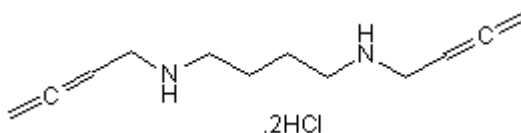
**Batch No.:** 1

**CAS Number:** 93565-01-6

**IUPAC Name:** *N*1,*N*4-Di-2,3-butadienyl-1,4-butanediamine dihydrochloride

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>12</sub>H<sub>20</sub>N<sub>2</sub>·2HCl  
**Batch Molecular Weight:** 265.23  
**Physical Appearance:** Pale pink solid  
**Solubility:** water to 100 mM  
DMSO to 75 mM  
ethanol to 25 mM  
**Storage:** Desiccate at +4°C  
**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

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

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon Hydrogen Nitrogen		
Theoretical	54.34	8.36	10.56
Found	54.29	8.44	10.53

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**IUPAC Name:** N1,N4-Di-2,3-butadienyl-1,4-butanediamine dihydrochloride

**Description:**

Polyamine oxidase (POA) inhibitor. Does not inhibit monoamine oxidase or D-Amino acid oxidase. Displays anticancer and neuroprotective activity in vivo.

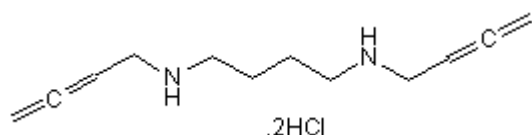
**Physical and Chemical Properties:**

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Batch Molecular Weight: 265.23

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**Storage:** Desiccate at +4°C

**Solubility & Usage Info:**

water to 100 mM

DMSO to 75 mM

ethanol to 25 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:**

**Bey et al** (1985) N-2,3-butadienyl-1,4-butanediamine derivatives: potent irreversible inactivators of mammalian polyamine oxidase. *J.Med.Chem.* **28** 1. PMID: 3965702.

**Dogan et al** (1999) Effects of MDL 72527, a specific inhibitor of polyamine oxidase, on brain edema, ischemic injury volume, and tissue polyamine levels in rats after temporary middle cerebral artery occlusion. *J.Neurochem.* **72** 765. PMID: 9930751.

**Basu et al** (2009) A small molecule polyamine oxidase inhibitor blocks androgen-induced oxidative stress and delays prostate cancer progression in the transgenic adenocarcinoma of the mouse prostate model. *Cancer Res.* **69** 7689. PMID: 19773450.

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USA & CANADA Tel: (800) 343-7475 EUROPE Tel: +44 (0)1235 529449 CHINA Tel: +86 (21) 52380373  
www.RnDSystems.com

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