

## Certificate of Analysis

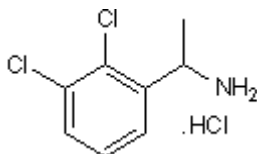
[www.tocris.com](http://www.tocris.com)

**Product Name:** LY 78335  
**CAS Number:** 39959-66-5  
**IUPAC Name:** 2,3-Dichloro- $\alpha$ -methylbenzylamine hydrochloride

**Catalog No.:** 4060 **Batch No.:** 1

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>8</sub>H<sub>9</sub>Cl<sub>2</sub>N.HCl  
**Batch Molecular Weight:** 226.53  
**Physical Appearance:** Off-white solid  
**Solubility:** water to 100 mM with gentle warming  
DMSO to 100 mM with gentle warming  
**Storage:** Desiccate at RT  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.5 (Chloroform:Methanol:Ammonia soln. [80:20:1])  
**HPLC:** Shows 99.1% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	42.42	4.45	6.18
Found	42.01	4.36	6.04

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

## Product Information

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**Catalog No.:** 4060

**Batch No.:** 1

**CAS Number:** 39959-66-5

**IUPAC Name:** 2,3-Dichloro- $\alpha$ -methylbenzylamine hydrochloride

### Description:

High affinity inhibitor of phenylethanolamine-N-methyltransferase (PNMT) ( $K_i = 0.09 \mu\text{M}$  in vitro). Suppresses the release of growth hormone in an in vivo rat model.

### Physical and Chemical Properties:

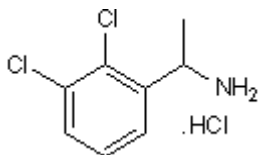
Batch Molecular Formula:  $\text{C}_8\text{H}_9\text{Cl}_2\text{N} \cdot \text{HCl}$

Batch Molecular Weight: 226.53

Physical Appearance: Off-white solid

**Minimum Purity:** >99%

### Batch Molecular Structure:



**Storage:** Desiccate at RT

### Solubility & Usage Info:

water to 100 mM with gentle warming

DMSO to 100 mM with gentle warming

### 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:

**Fuller et al** (1973) Inhibition of phenylethanolamine N-methyltransferase by benzylamines. 2. In vitro and in vivo studies with 2,3-dichloro- $\alpha$ -methylbenzylamine. *J.Med.Chem.* **16** 106. PMID: 4683104.

**Terry et al** (1982) Regulation of episodic growth hormone secretion by the central epinephrine system. *J.Clin.Invest.* **69** 104. PMID: 7054231.

**Grunewald et al** (1988) Synthesis and evaluation of 3-substituted analogues of 1,2,3,4-tetrahydroisoquinoline as inhibitors of phenylethanolamine N-methyltransferase. *J.Med.Chem.* **31** 824. PMID: 3351861.

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