

Product Name: Verapamil hydrochloride

Catalog No.: 0654 **Batch No.:** 8

CAS Number: 152-11-4

EC Number: 205-800-5

IUPAC Name: α -[3-[[2-(3,4-Dimethoxyphenyl)ethyl]methylamino]propyl]-3,4-dimethoxy- α -(1-methylethyl)benzeneacetonitrile hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₇H₃₈N₂O₄·HCl

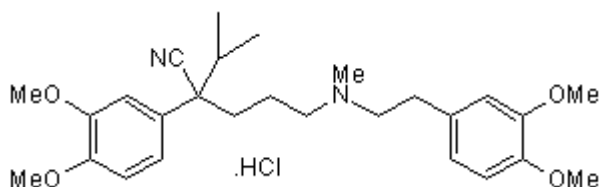
Batch Molecular Weight: 491.07

Physical Appearance: White solid

Solubility: ethanol to 50 mM
water to 100 mM
DMSO to 50 mM

Storage: Store at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.7% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	66.04	8.01	5.7
Found	66.37	8.05	5.74

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Description:

L-type calcium channel blocker. Vasodilator, adrenergic antagonist.

Physical and Chemical Properties:

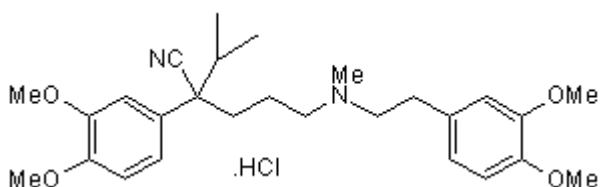
Batch Molecular Formula: C₂₇H₃₈N₂O₄.HCl

Batch Molecular Weight: 491.07

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

ethanol to 50 mM

water to 100 mM

DMSO to 50 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:

Merck Index **12** 10083.

Ishibashi et al (1995) Block of P-type Ca²⁺ channels in freshly dissociated rat cerebellar Purkinje neurons by diltiazem and verapamil. *Brain Res.* **695** 88. PMID: 8574653.

Lacinova et al (1995) Interaction of RO-40-5967 and verapamil with the stably expressed α_1 -subunit of the cardiac L-type calcium channel. *J.Pharmacol.Exp.Ther.* **274** 54. PMID: 7616442.

Ustunes et al (1996) Effects of verapamil on intimal thickening and vascular reactivity in the collared carotid artery of the rabbit. *Br.J.Pharmacol.* **118** 1681. PMID: 8842432.

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