

## Certificate of Analysis

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**Product Name:** YS-035 hydrochloride

**Catalog No.:** 0416

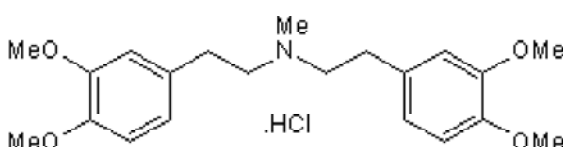
**Batch No.:** 3

CAS Number: 89805-39-0

IUPAC Name: *N,N*-Bis-(3,4-dimethoxyphenylethyl)-*N*-methylamine hydrochloride

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>21</sub>H<sub>29</sub>NO<sub>4</sub>.HCl  
**Batch Molecular Weight:** 395.9  
**Physical Appearance:** White crystalline solid  
**Solubility:** water to 100 mM  
**Storage:** Desiccate at RT  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.6 (Dichloromethane:Methanol:Ammonia soln. [10:1:0.1])  
**Melting Point:** Between 180 - 181°C  
**<sup>1</sup>H NMR:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	63.71	7.64	3.54
Found	63.63	7.63	3.52

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

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**Description:**

YS-035 hydrochloride is a Ca<sup>2+</sup> blocker that strikingly prolongs cardiac action potentials by inhibiting pacemaker current and K<sup>+</sup> outward currents.

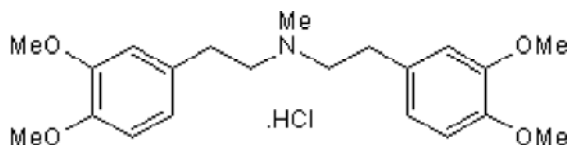
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Batch Molecular Weight: 395.9

Physical Appearance: White crystalline solid

**Batch Molecular Structure:**



**Storage:** Desiccate 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:**

**Berger *et al*** (1991) Inhibition of potassium outward currents and pacemaker current in sheep cardiac Purkinje fibres by the vera. derivative YS-035. *Naunyn Schmiedebergs Arch.Pharmacol.* **344** 653. PMID: 1775198.

**Deana *et al*** (1984) Properties of a new calcium ion antagonist on cellular uptake and mitochondrial efflux of calcium ions. *Biochem.J.* **218** 899. PMID: 6721841.

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