

## Certificate of Analysis

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**Product Name:** Cesium chloride

CAS Number: 7647-17-8

IUPAC Name: <

**Catalog No.:** 4739

EC Number: 231-600-2

**Batch No.:** 1

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** CsCl  
**Batch Molecular Weight:** 168.36  
**Physical Appearance:** White solid  
**Solubility:** water to 100 mM  
**Storage:** Desiccate at RT  
**Batch Molecular Structure:** CsCl

### 2. ANALYTICAL DATA

**Purity by titration with AgNO<sub>3</sub>:** 101 %  
**Lithium:** <0.001 %  
**Lead:** Not detected  
**Sulfate:** <100 ppm

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

## Product Information

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### Description:

Potassium channel blocker; inhibits the pacemaker current ( $I_f$ ) and the hyperpolarization-activated cationic current ( $I_h$ ). Prevents activation of caspase-3 and neuronal apoptosis in serum- and potassium-deprived cerebellar granule neurons by inactivating GSK-3 $\beta$ .

### Physical and Chemical Properties:

Batch Molecular Formula: CsCl

Batch Molecular Weight: 168.36

Physical Appearance: White solid

### Batch Molecular Structure:

CsCl

**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:

**Sharma et al** (2012) Magnesium sulfate suppresses L-type calcium currents on the basilar artery smooth muscle cells in rabbits. *Neurol.Res.* **34** 291. PMID: 22450340.

**Zhong et al** (2007) Cesium chloride protects cerebellar granule neurons from apoptosis induced by low potassium. *Int.J.Dev.Neurosci.* **25** 359. PMID: 17804190.

**Wallick et al** (1997) Effects of ionic channel antagonists barium, cesium, and UL-FS-49 on vagal slowing of atrial rate in dogs. *Am.J.Physiol.* **273** H2155. PMID: 9374748.

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