

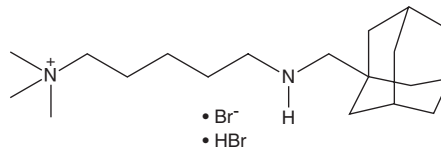
# PRODUCT INFORMATION



## IEM 1460

Item No. 15623

**CAS Registry No.:** 121034-89-7  
**Formal Name:** N,N,N-trimethyl-5-[[tricyclo[3.3.1.1<sup>3,7</sup>]dec-1-ylmethyl)amino]-1-pentanaminium, bromide, hydrobromide  
**MF:** C<sub>19</sub>H<sub>37</sub>N<sub>2</sub>Br • HBr  
**FW:** 454.3  
**Purity:** ≥98%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

IEM 1460 is supplied as a crystalline solid. A stock solution may be made by dissolving the IEM 1460 in the solvent of choice. IEM 1460 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of IEM 1460 in these solvents is approximately 30 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of IEM 1460 can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of IEM 1460 in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

IEM 1460 is an adamantane derivative that blocks both AMPA- and NMDA-type glutamate receptor (GluR) channels (IC<sub>50</sub> = 10 μM-0.1 mM).<sup>1</sup> It is selective for Ca<sup>2+</sup>-permeable GluR channels, which lack the GluR2 R subunit, and has been used to identify Ca<sup>2+</sup>-permeable glutamate receptors in the brain.<sup>1</sup>

### Reference

- Schlesinger, F., Tammema, D., Krampfl, K., *et al.* Two mechanisms of action of the adamantane derivative IEM-1460 at human AMPA-type glutamate receptors. *Br. J. Pharmacol.* **145(5)**, 656-663 (2005).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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