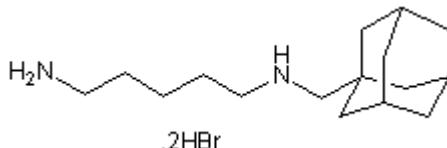


Certificate of Analysiswww.tocris.com**Product Name:** IEM 1754 dihydrobromide**Catalog No.:** 4199**Batch No.:** 1

CAS Number: 162831-31-4

IUPAC Name: *N*-(Tricyclo[3.3.1.13,7]dec-1-ylmethyl)-1,5-pentanediamine dihydrobromide**1. PHYSICAL AND CHEMICAL PROPERTIES****Batch Molecular Formula:** C₁₆H₃₀N₂.2HBr**Batch Molecular Weight:** 412.25**Physical Appearance:** White solid**Solubility:** water to 100 mM
DMSO to 50 mM**Storage:** Store at RT**Batch Molecular Structure:****2. ANALYTICAL DATA****TLC:** R_f = 0.14 (Dichloromethane:Methanol:Ammonia soln. [79:20:1])**HPLC:** Shows 100% purity**¹H NMR:** Consistent with structure**Mass Spectrum:** Consistent with structure**Microanalysis:** Carbon Hydrogen Nitrogen

Theoretical 46.62 7.82 6.8

Found 46.58 7.76 6.74

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

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Product Information

www.tocris.com
Product Name: IEM 1754 dihydrobromide

Catalog No.: 4199

Batch No.: 1

CAS Number: 162831-31-4

IUPAC Name: N-(Tricyclo[3.3.1.13,7]dec-1-ylmethyl)-1,5-pentanediamine dihydrobromide

Description:

Voltage-dependent open-channel blocker of AMPA receptors. Selective between subtypes; blocks GluR2 subunit-lacking (Ca^{2+} -permeable) receptors more potently than GluR2-containing receptors. Also potently blocks NMDA receptor channels. Less sensitive than IEM 1460 (Cat. No. 1460) at a holding potential between -40 and -80mV.

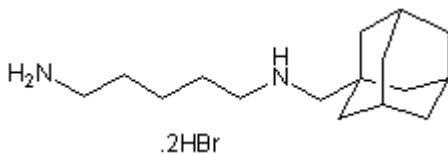
Physical and Chemical Properties:

 Batch Molecular Formula: $\text{C}_{16}\text{H}_{30}\text{N}_2\cdot 2\text{HBr}$

Batch Molecular Weight: 412.25

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:

Storage: Store at RT

Solubility & Usage Info:

 water to 100 mM
 DMSO to 50 mM

CAUTION - This product is hygroscopic and we recommend that it is desiccated upon arrival.

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:

Magazanik et al (1997) Block of open channels of recombinant AMPA receptors and native AMPA/kainate receptors by adamantane derivatives. *J.Physiol.* **505** 655. PMID: 9457643.

Tikhonov et al (2000) Voltage-dependent block of native AMPA receptor channels by dicationic compounds. *Br.J.Pharmacol.* **129** 265. PMID: 10694232.

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