

Certificate of Analysis

www.tocris.com

Product Name: LM22B 10

Catalog No.: 6037

Batch No.: 2

CAS Number: 342777-54-2

IUPAC Name: 2,2',2'',2'''-[[[(4-Chlorophenyl)methylene]bis(4,1-phenylenenitrilo)]tetrakisethanol

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₇H₃₃ClN₂O₄·¼H₂O

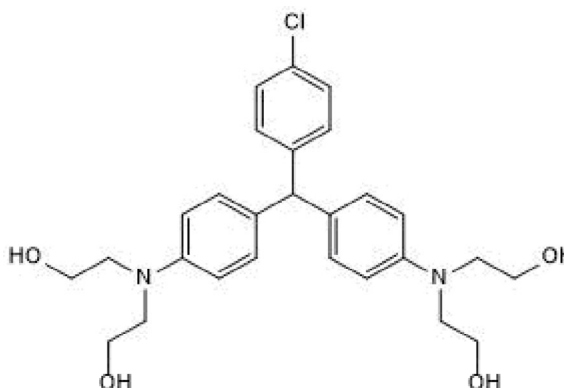
Batch Molecular Weight: 489.52

Physical Appearance: Green solid

Solubility: DMSO to 100 mM
ethanol to 10 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.3 (Dichloromethane:Methanol [95:5])

HPLC: Shows 96.9% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon Hydrogen Nitrogen		
Theoretical	66.25	6.9	5.72
Found	66.35	6.88	5.59

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

bio·techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956

Product Name: LM22B 10

Catalog No.: 6037

Batch No.: 2

CAS Number: 342777-54-2

IUPAC Name: 2,2',2'',2'''-[[[(4-Chlorophenyl)methylene]bis(4,1-phenylenenitrilo)]tetrakisethanol

Description:

LM22B 10 is a TrkB and TrkC agonist. Exhibits neurotrophic activity (EC_{50} = 200-300 nM), improves survival and increases neurite outgrowth in hippocampal cells in vitro. Exhibits no significant activity in a screen of 57 other receptors and transporters. Inhibits binding of BDNF and neurotrophin-3 to TrkB and TrkC, respectively. Active in vivo and brain penetrant.

Physical and Chemical Properties:

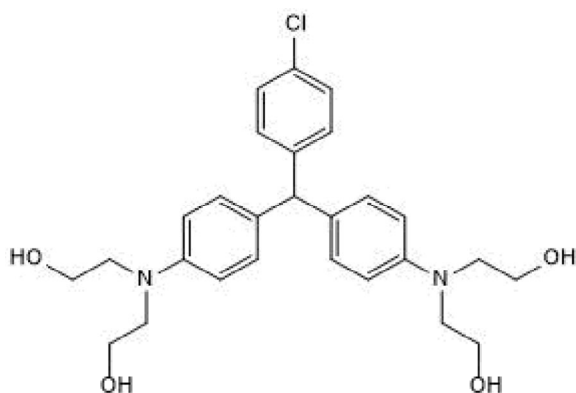
Batch Molecular Formula: $C_{27}H_{33}ClN_2O_4 \cdot \frac{1}{4}H_2O$

Batch Molecular Weight: 489.52

Physical Appearance: Green solid

Minimum Purity: ≥97%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 10 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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:

Yang et al (2016) A small molecule TrkB/TrkC neurotrophin receptor co-activator with distinctive effects on neuronal survival and process outgrowth. *Neuropharmacology* **110** 343. PMID: 27334657.

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

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956