

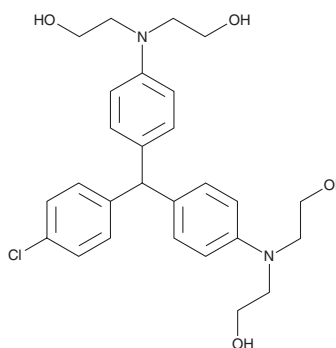
PRODUCT INFORMATION



LM22B-10

Item No. 29037

CAS Registry No.: 342777-54-2
Formal Name: 2,2',2'',2'''-[[[(4-chlorophenyl)methylene]bis(4,1-phenylenenitrilo)]tetrakis-ethanol
MF: C₂₇H₃₃ClN₂O₄
FW: 485.0
Purity: ≥98%
UV/Vis.: λ_{max}: 268 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

LM22B-10 is supplied as a crystalline solid. A stock solution may be made by dissolving the LM22B-10 in the solvent of choice, which should be purged with an inert gas. LM22B-10 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of LM22B-10 in these solvents is approximately 30 mg/ml.

Description

LM22B-10 is an activator of neurotrophic tyrosine kinase receptor 2 (TrkB) and -3 (TrkC).¹ It is selective for TrkB and TrkC over TrkA in NIH3T3 cells but does inhibit the serotonin (5-HT) receptor subtype 5-HT_{5A} and the dopamine transporter by greater than 50% in a panel of 57 G protein-coupled peptide and nonpeptide receptors at 10 μM. LM22B-10 increases survival, neurite length, and dendritic spine density of primary mouse embryonic hippocampal neurons when used at a concentration of 1 μM. LM22B-10 (50 mg/kg i.p. in combination with an intranasal dose of 5 mg/kg per day) also increases hippocampal neuron dendritic spine density in aged mice.

Reference

1. Yang, T., Massa, S.M., Tran, K.C., *et al.* A small molecule TrkB/TrkC neurotrophin receptor co-activator with distinctive effects on neuronal survival and process outgrowth. *Neuropharmacology* **110(Pt A)**, 343-361 (2016).

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.

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