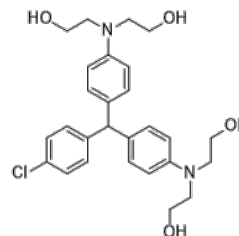


Product Name : LM22B-10
Cat. No. : PC-22385
CAS No. : 342777-54-2
Molecular Formula : C₂₇H₃₃ClN₂O₄
Molecular Weight : 485.02
Target : Trk Receptor
Solubility : 10 mM in DMSO



Biological Activity

LM22B-10 is a small molecule agonist neurotrophin (NT) receptor TrkB and TrkC, selectively binds to and activates TrkB as well as TrkC, shows neurotrophic activities.

LM22B-10 binds to TrkB-Fc and TrkC-Fc in a dose-dependent manner, but not TrkA-Fc or p75NTR-Fc, displaces BDNF from TrkB and NT-3 from TrkC.

LM22B-10 promotes cell survival preferentially through TrkB and TrkC. LM22B-10, but not BDNF or NT-3, promotes neurite outgrowth in an inhibitory environment.

LM22B-10 selectively induces TrkB, TrkC, AKT and ERK phosphorylation in hippocampal neurons in culture.

LM22B-10 (5 mg/kg IN) penetrates the BBB, and induces TrkB and TrkC phosphorylation and downstream signaling in vivo.

References

Yang T, et al. *Neuropharmacology*. 2016 Nov;110(Pt A):343-361.

Xiang RL, et al. *J Cell Physiol*. 2020 Jan;235(1):232-244.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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