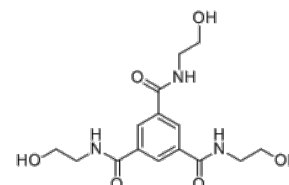


Product Name : LM22A-4
Cat. No. : PC-61680
CAS No. : 37988-18-4
Molecular Formula : C₁₅H₂₁N₃O₆
Molecular Weight : 339.34
Target : Trk Receptor
Solubility : 50 mM in DMSO; 100 mM in H₂O



Biological Activity

LM22A-4 is a small molecule BDNF mimetic that act as a direct and specific partial agonist of **TrkB** (EC₅₀=200-500 pM), but not other Trks or p75(NTR).

LM22A-4 prevents neuronal degeneration with efficacy equal to that of BDNF in vitro models of neurodegenerative disease. LM22A-4 causes hippocampal and striatal TrkB activation in mice and improved motor learning after traumatic brain injury in rats.

LM22A-4 reduces motor impairment and neuropathology in R6/2 and BACHD mouse models of Huntington's disease.

References

Simmons DA, et al. *J Neurosci*. 2013 Nov 27;33(48):18712-27.

Massa SM, et al. *J Clin Invest*. 2010 May;120(5):1774-85.

Kajiya M, et al. *Int Immunopharmacol*. 2014 Apr;19(2):245-52.

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

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