

## **Data Sheet**

WWW.PROBECHEM.COM

Global Supplier of Chemical Probes, Inhibitors & Agonists.

 Product Name
 :
 LM22A-4

 Cat. No.
 :
 PC-61680

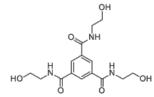
 CAS No.
 :
 37988-18-4

 Molecular Formula
 :
 C<sub>15</sub>H<sub>21</sub>N<sub>3</sub>O<sub>6</sub>

 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!

E-mail: tech@probechem.com