

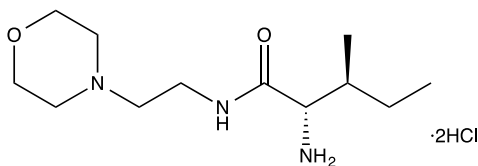
Catalog # 10-1526

LM11A-31 dihydrochloride

CAS# 1243259-19-9

(2S,3S)-2-Amino-3-methyl-N-[2-(4-morpholinyl)ethyl]pentanamide, dihydrochloride

Lot # S104212A



A nonpeptide neurotrophic factor receptor p75 (p75^{NTR}) agonist which promotes survival signaling in neurotrophin-responsive cells.¹ Promotes functional recovery in a mouse model of spinal contusion injury.² Protects neurogenesis after traumatic brain injury.³ Reverses cholinergic neurite dystrophy in Alzheimer's disease mouse models.⁴ Stabilizes neuronal calcium, preserves mitochondrial movement and protects against HIV-associated neuropathogenesis.⁵ Orally active and blood-brain barrier permeant.

- 1) Massa *et al.* (2006), *Small, Nonpeptide p75^{NTR} Ligands Induce Survival Signaling and Inhibit proNGF-Induced Death*; J.Neurosci. **26** 5288
- 2) Tep *et al.*, (2013), *Oral administration of a small molecule targeted to block proNGF binding to p75 promotes myelin sparing and functional recovery after spinal cord injury*; J.Neurosci. **33** 397
- 3) Shi *et al.* (2013), *A small molecule p75(NTR) ligand protects neurogenesis after traumatic brain injury*; Stem Cells **31** 2561
- 4) Simmons *et al.* (2014), *A small molecule p75(NTR) ligand, LM11A-31, reverses cholinergic neurite dystrophy in Alzheimer's disease mouse models with mid- to late-stage disease progression*; PLoS One **9** e102136
- 5) Meeker *et al.* (2016), *Novel p75 neurotrophin receptor ligand stabilizes neuronal calcium, preserves mitochondrial movement and protects against HIV associated neuropathogenesis*; Exp.Neurol. **275 Pt.1** 182

PHYSICAL DATA

Molecular Weight:	316.27
Molecular Formula:	C ₁₂ H ₂₅ N ₃ O ₂ ·2HCl
Purity:	>98% by TLC
	NMR: (Conforms)
Solubility:	Soluble in DMSO (20 mg/ml) and water (30 mg/ml)
Physical Description:	Pale yellow solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Store solutions at -20°C for up to 1 month.

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