

Catalog # 10-2937 Tianeptine sodium salt

CAS# 30123-17-2

7-[(3-chloro-6,11-dihydro-6-methyl-5,5-dioxidibenzo[c,f][1,2]thiazepin-11-yl)amino]heptamoic acid, sodium salt Lot # X107422

Selective enhancer of serotonin uptake in the brain with no effect on noradrenalin or dopamine uptake.¹ Clinically useful antidepressant.² Displays neuroprotective effects against hypoxia in cell culture and against the deleterious effects of cytokines *in vivo*.³ Induces mTORC1 activation in rat hippocampal neurons and increases dendritic outgrowth, spine density and synaptic proteins.⁴ Attenuates LPS-evoked inflammatory activation of microglial cells in culture.⁵

- 1) Mennini et al. (1987), Tianeptine, a selective enhancer of serotonin uptake in rat brain; Naunyn-Schmied. Arch. Pharmacol., 336 478
- 2) Kato and Weitsch (1988), Neurochemical profile of tianeptine, a new antidepressant drug; Clin. Neuropharmacol., 11 S43
- 3) Plaisant et al. (2003), Neuroprotective properties of tianeptine: interactions with cytokines; Neuropharmacology, 44 801
- 4) Seo et al. (2016), Tianeptine induces mTORC1 activation in rat hippocampal neurons under toxic conditions; Psychopharmacology (Berl.), **233** 2617
- 5) Slusarczyk et al. (2017), Anti-inflammatory properties of tianeptine on lipopolysaccharide-induced changes in microglial cells involve toll-like receptor-related pathways; J. Neurochem., **136** 958

PHYSICAL DATA

Molecular Weight: 458.93

Molecular Formula: C₂₁H₂₄ClN₂O₄S Na Purity: 98% by HPLC NMR: (Conforms)

Solubility: DMSO (up to 5 mg/ml) or in Water (up to 45 mg/ml)

Physical Description: White solid

Storage and Stability: Store as supplied desiccated at room temperature for up to 1 year from the date of purchase.

Solutions in DMSO or distilled water may be stored at -20°C for up to 2 months.

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