# Catalog # 10-2937
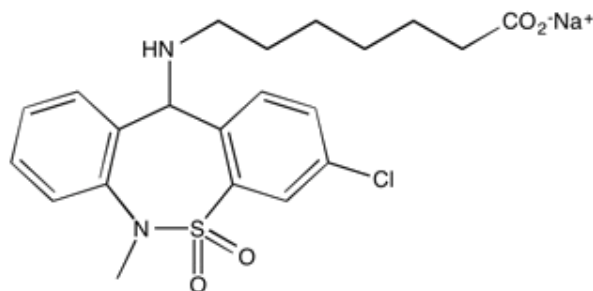## Tianeptine sodium salt
CAS# 30123-17-2

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:     $C_{21}H_{24}ClN_2O_4S$  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.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**