

Certificate of Analysis

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Product Name: Tianeptine sodium salt

Catalog No.: 1972

Batch No.: 2

CAS Number: 30123-17-2

EC Number: 250-059-3

IUPAC Name: 7-[(3-Chloro-6,11-dihydro-6-methyl-5,5-dioxidibenzo[c,f][1,2]thiazepin-11-yl)amino]heptanoic acid sodium salt

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₁H₂₄ClN₂NaO₄S.H₂O

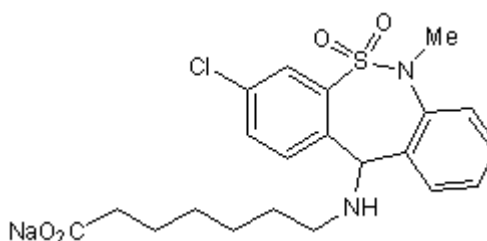
Batch Molecular Weight: 476.95

Physical Appearance: White solid

Solubility:
water to 100 mM
DMSO to 10 mM
ethanol to 10 mM

Storage: Desiccate at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 100% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	52.88	5.49	5.87
Found	52.76	5.33	5.84

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

Selective facilitator of 5-HT uptake in vitro and in vivo. Has no affinity for a wide range of receptors, including 5-HT and dopamine ($IC_{50} > 10 \mu M$) and has no effect on noradrenalin or dopamine uptake. Antidepressant, analgesic and neuroprotective following systemic administration in vivo.

Physical and Chemical Properties:

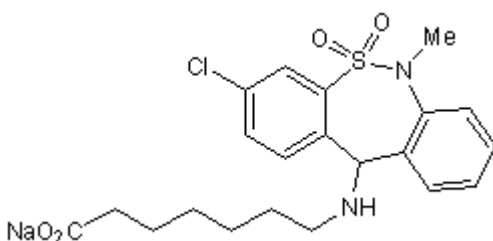
Batch Molecular Formula: $C_{21}H_{24}ClN_2NaO_4S \cdot H_2O$

Batch Molecular Weight: 476.95

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Desiccate at RT

Solubility & Usage Info:

water to 100 mM
DMSO to 10 mM
ethanol to 10 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Mennini et al (1987) Tianeptine, a selective enhancer of serotonin uptake in rat brain. *Naunyn-Schmied.Arch.Pharmacol.* **336** 478.

Kato and Weitsch (1988) Neurochemical profile of tianeptine, a new antidepressant drug. *Clin.Neuropharmacol.* **11** S43. PMID: 3052825.

Uzbay et al (1999) Analgesic effect of tianeptine in mice. *Life Sci.* **64** 1313. PMID: 10227587.

Plaisant et al (2003) Neuroprotective properties of tianeptine: interactions with cytokines. *Neuropharmacology* **44** 801. PMID: 12681378.

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