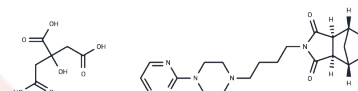


## Tandospirone citrate

## Chemical Properties

CAS No. : 112457-95-1  
 Formula: C<sub>27</sub>H<sub>37</sub>N<sub>5</sub>O<sub>9</sub>  
 Molecular Weight: 575.61  
 Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year  
 Actual storage temperature shall be subject to the COA.



## Biological Description

Description	Tandospirone citrate (SM-3997 citrate) is a potent and selective 5-HT <sub>1A</sub> receptor partial agonist (K <sub>i</sub> : 27 nM)
Targets(IC <sub>50</sub> )	5-HT Receptor
In vivo	Improvements in total abdominal scores were significantly larger with tandospirone than placebo at weeks 1, 2, and 4. Significantly greater improvements in the tandospirone group were observed in upper abdominal pain (P=0.02) and discomfort (P=0.002) at week 4. The proportion of responders was significantly greater in the active treatment arm at weeks 3 (P=0.017) and 4 (P=0.0016). Significant improvements in STAI (P<0.0001) were reported in both arms, as well as in the majority of questions in the SF-8 (P=0.04). No serious adverse events were reported, with similar rates in both study arms [1]
Cell Research	In this double-blind, placebo-controlled, multicenter study, FD patients were randomized to treatment with 10 mg t.i.d. tandospirone citrate or to placebo for 4 weeks. The primary end point was change in abdominal symptom scores. The difference in the proportion of responders (a total abdominal symptom score of 0 or 1) was also assessed. The quality-of-life questionnaire, the SF-8, and a psychological test questionnaire, the State-Trait Anxiety Inventory (STAI), were completed at baseline and at weekly intervals[1]

## Solubility Information

Solubility	H <sub>2</sub> O: 10.4 mg/mL (18.07 mM), Sonication is recommended. DMSO: 50 mg/mL (86.86 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	1.7373 mL	8.6864 mL	17.3729 mL
5 mM	0.3475 mL	1.7373 mL	3.4746 mL
10 mM	0.1737 mL	0.8686 mL	1.7373 mL
50 mM	0.0347 mL	0.1737 mL	0.3475 mL

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Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Miwa H , Nagahara A , Tominaga K , et al. Efficacy of the 5-HT1A Agonist Tansospirone Citrate in Improving Symptoms of Patients With Functional Dyspepsia: A Randomized Controlled Trial[J]. The American Journal of Gastroenterology, 2009, 104(11):2779-2787.

Kannari K , Kurahashi K , Tomiyama M , et al. [Tansospirone citrate, a selective 5-HT1A agonist, alleviates L-DOPA-induced dyskinesia in patients with Parkinson's disease][J]. Nō to shinkei = Brain and nerve, 2002, 54(2):133-137.

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