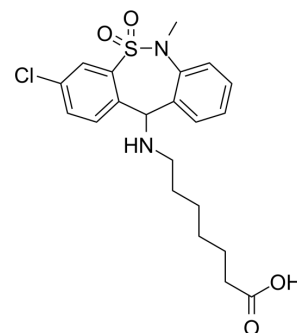


## Tianeptine

<b>Cat. No.:</b>	HY-90003		
<b>CAS No.:</b>	72797-41-2		
<b>Molecular Formula:</b>	C <sub>21</sub> H <sub>25</sub> ClN <sub>2</sub> O <sub>4</sub> S		
<b>Molecular Weight:</b>	436.95		
<b>Target:</b>	5-HT Receptor		
<b>Pathway:</b>	GPCR/G Protein; Neuronal Signaling		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 10 mg/mL (22.89 mM; Need ultrasonic)					
		Solvent Concentration	Mass	1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM		2.2886 mL	11.4430 mL	22.8859 mL
		5 mM		0.4577 mL	2.2886 mL	4.5772 mL
10 mM			0.2289 mL	1.1443 mL	2.2886 mL	
Please refer to the solubility information to select the appropriate solvent.						
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 1 mg/mL (2.29 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 1 mg/mL (2.29 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 1 mg/mL (2.29 mM); Clear solution</li> </ol>					

### BIOLOGICAL ACTIVITY

<b>Description</b>	Tianeptine is a selective facilitator of 5-HT uptake. Tianeptine has no affinity for a wide range of receptors, including 5-HT and dopamine (IC <sub>50</sub> >10 μM) and has no effect on noradrenalin or dopamine uptake. Tianeptine has antidepressant, anxiolytic, analgesic and neuroprotective activities <sup>[1][2][3][4]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	serotonin

- Nat Commun. 2018 Oct 15;9(1):4272.

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## REFERENCES

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- [2]. Alamo C, et, al. Tianeptine, an atypical pharmacological approach to depression. Rev Psiquiatr Salud Ment. Jul-Sep 2019;12(3):170-186.
- [3]. Uzbay IT, et, al. Analgesic effect of tianeptine in mice. Life Sci. 1999;64(15):1313-9.
- [4]. Plaisant F, et, al. Neuroprotective properties of tianeptine: interactions with cytokines. Neuropharmacology. 2003 May;44(6):801-9.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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