Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Tandospirone

Catalog No: tcsc1709

Available Sizes

Size: 10mg

Size: 50mg

Specifications

CAS No:
87760-53-0

Formula:
$C_{21}H_{29}N_5O_2$

Pathway:
Neuronal Signaling;GPCR/G Protein

Target:
5-HT Receptor;5-HT Receptor

Purity / Grade:
>98%

Solubility:
H2O :

Alternative Names:
SM-3997

Observed Molecular Weight:
383.49

Product Description

Tandospirone(SM-3997) is a potent and selective 5-HT1A receptor partial agonist (Ki = 27 nM) that displays selectivity over SR-2, SR-1C, α1, α2, D1 and D2 receptors (Ki values ranging from 1300-41000 nM).

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IC50 Value: 27±5 nM(Ki) [1]

Target: 5-HT1A

in vitro: Tandospirone is most potent at the 5-HT1A receptor, displaying a Ki value of 27 +/- 5 nM. The agent is approximately two to three orders of magnitude less potent at 5-HT2, 5-HT1C, alpha 1-adrenergic, alpha 2-adrenergic, and dopamine D1 and D2 receptors (Ki values ranging from 1300 to 41000 nM). Tandospirone is essentially inactive at 5-HT1B receptors; 5-HT uptake sites; beta-adrenergic, muscarinic cholinergic, and benzodiazepine receptors [1]. 3H-SM-3997 bound rapidly, reversibly and in a saturable manner with high affinity to rat brain hippocampal membranes (Kd = 9.4 nM, Bmax = 213 fmol/mg protein) [2].

in vivo: Chronic treatment with tandospirone, at 0.2 and 1.0mg/kg/day, but not 2.0mg/kg/day, attenuated footshock stress-induced eLAC elevation in the mPFC [3]. Rats were acutely administered tandospirone (0, 0.1, and 1 mg/kg, i.p.). Tandospirone decreased the number of premature responses, an index of impulsive action, in a dose-dependent manner [4].

Toxicity: It is not believed to be addictive but it is known to produce mild withdrawal effects (e.g. anorexia) after abrupt discontinuation.