RedChemExpress

Product Data Sheet

Inhibitors • Screening Libraries • Proteins

Ziprasidone mesylate trihydrate

Cat. No.:	HY-14542B	
CAS No.:	199191-69-0	,CI
Molecular Formula:	C ₂₂ H ₃₁ ClN ₄ O ₇ S ₂	HŅ N N N N
Molecular Weight:	563.09	0
Target:	5-HT Receptor; Dopamine Receptor	H ₂ O _Q
Pathway:	GPCR/G Protein; Neuronal Signaling	H ₂ O — S-OH H ₂ O O
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.	-

Discussion Ziprasidone (CP-88059) mesylate trihydrate is an orally active combined 5-HT and dopamine receptor antagonist ^[1] . Ziprasidone mesylate trihydrate has affinities for Rat D ₂ (K ₁ =4.8 nM), 5-HT _{2A} (K ₁ =0.42 nM) and 5-HT _{1A} (K ₁ =3.4 nM) ^[1] . ICs ₅₀ & Target Rat 5-HT ₂ Receptor 0.42 nM (Ki) Rat 5-HT _{1A} Receptor 3.4 nM (Ki) Rat D ₂ Receptor 4.8 nM (Ki) In Vitro Ziprasidone mesylate trihydrate (0-500 nM, 150 seconds) blocks wild-type hERG current ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Viability Assay Cell Line: HEK-293 cells ^[2] Concentration: 0-500 nM Incubation Time: 150 seconds Result: Blocked wild-type hERG current in a voltage- and concentration-dependent manner (IC ₅₀ = 120 nm). In Vivo Ziprasidone mesylate trihydrate (oral gavage; 20 mg/kg; once daily; 7 weeks) results in weight loss, low level physical activity, high resting energy expenditure and greater capacity for thermogenesis when subjected to cold ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Animal Model: Eight-week-old female Sprague-Dawley rats weighing 200 to 250 g ^[3] . Desage: 20 mg/kg Administration: Oral gavage; 20 mg/kg; once daily; 7 weeks Result: Gained significantly less weight (P = 0.031), had a lower level of physical activity (P = 0.031), showed	BIOLOGICAL ACTIVITY					
0.42 nM (Ki) 3.4 nM (Ki) 4.8 nM (Ki) In Vitro Ziprasidone mesylate trihydrate (0-500 nM, 150 seconds) blocks wild-type hERG current ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Viability Assay Cell Viability Assay Cell Uiability Assay Cell Line: HEK-293 cells ^[2] Concentration: 0-500 nM Incubation Time: 150 seconds Result: Blocked wild-type hERG current in a voltage- and concentration-dependent manner (IC ₅₀ = 120 nm). Ziprasidone mesylate trihydrate (oral gavage; 20 mg/kg; once daily; 7 weeks) results in weight loss, low level physical activity, high resting energy expenditure and greater capacity for thermogenesis when subjected to cold ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Animal Model: Eight-week-old female Sprague-Dawley rats weighing 200 to 250 g ^[8] Dosage: 20 mg/kg Administration: Oral gavage; 20 mg/kg; once daily; 7 weeks Result: Gained significantly less weight (P = 0.031), had a lower level of physical activity (P = 0.016), showed a higher resting energy expenditure (P < 0.001), and displayed a greater		Ziprasidone (CP-88059) mesylate trihydrate is an orally active combined 5-HT and dopamine receptor antagonist $^{[1]}$.				
MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Viability Assay Cell Viability Assay Cell Line: HEK-293 cells ^[2] Concentration: 0-500 nM Incubation Time: 150 seconds Result: Blocked wild-type hERG current in a voltage- and concentration-dependent manner (IC ₅₀ = 120 nm). In Vivo Ziprasidone mesylate trihydrate (oral gavage; 20 mg/kg; once daily; 7 weeks) results in weight loss, low level physical activity, high resting energy expenditure and greater capacity for thermogenesis when subjected to cold ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Animal Model: Eight-week-old female Sprague-Dawley rats weighing 200 to 250 g ^[3] . Dosage: 20 mg/kg Administration: Oral gavage; 20 mg/kg; once daily; 7 weeks Result: Gained significantly less weight (P = 0.031), had a lower level of physical activity (P = 0.016), showed a higher resting energy expenditure (P < 0.001), and displayed a greater	IC ₅₀ & Target		271 1			
Concentration:0-500 nMIncubation Time:150 secondsResult:Blocked wild-type hERG current in a voltage- and concentration-dependent manner (IC50 = 120 nm).In VivoZiprasidone mesylate trihydrate (oral gavage; 20 mg/kg; once daily; 7 weeks) results in weight loss, low level physical activity, high resting energy expenditure and greater capacity for thermogenesis when subjected to cold ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.Animal Model:Eight-week-old female Sprague-Dawley rats weighing 200 to 250 g ^[3] Dosage:Dosage:20 mg/kgAdministration:Oral gavage; 20 mg/kg; once daily; 7 weeks Result:Gained significantly less weight (P = 0.031), had a lower level of physical activity (P = 0.016), showed a higher resting energy expenditure (P < 0.001), and displayed a greater	In Vitro	MCE has not independently confirmed the accuracy of these methods. They are for reference only.				
Incubation Time: 150 seconds Result: Blocked wild-type hERG current in a voltage- and concentration-dependent manner (IC ₅₀ = 120 nm). In Vivo Ziprasidone mesylate trihydrate (oral gavage; 20 mg/kg; once daily; 7 weeks) results in weight loss, low level physical activity, high resting energy expenditure and greater capacity for thermogenesis when subjected to cold ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Animal Model: Eight-week-old female Sprague-Dawley rats weighing 200 to 250 g ^[3] Dosage: 20 mg/kg Administration: Oral gavage; 20 mg/kg; once daily; 7 weeks Result: Gained significantly less weight (P = 0.031), had a lower level of physical activity (P = 0.016), showed a higher resting energy expenditure (P < 0.001), and displayed a greater		Cell Line:	HEK-293 cells ^[2]			
Result:Blocked wild-type hERG current in a voltage- and concentration-dependent manner (IC50 = 120 nm).In VivoZiprasidone mesylate trihydrate (oral gavage; 20 mg/kg; once daily; 7 weeks) results in weight loss, low level physical activity, high resting energy expenditure and greater capacity for thermogenesis when subjected to cold ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.Animal Model:Eight-week-old female Sprague-Dawley rats weighing 200 to 250 g ^[3] Dosage:20 mg/kgAdministration:Oral gavage; 20 mg/kg; once daily; 7 weeksResult:Gained significantly less weight (P = 0.031), had a lower level of physical activity (P = 0.016), showed a higher resting energy expenditure (P < 0.001), and displayed a greater		Concentration:	0-500 nM			
120 nm). In Vivo Ziprasidone mesylate trihydrate (oral gavage; 20 mg/kg; once daily; 7 weeks) results in weight loss, low level physical activity, high resting energy expenditure and greater capacity for thermogenesis when subjected to cold ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Animal Model: Eight-week-old female Sprague-Dawley rats weighing 200 to 250 g ^[3] . Dosage: 20 mg/kg Administration: Oral gavage; 20 mg/kg; once daily; 7 weeks Result: Gained significantly less weight (P = 0.031), had a lower level of physical activity (P = 0.016), showed a higher resting energy expenditure (P < 0.001), and displayed a greater		Incubation Time:	150 seconds			
activity, high resting energy expenditure and greater capacity for thermogenesis when subjected to cold ^[3] .MCE has not independently confirmed the accuracy of these methods. They are for reference only.Animal Model:Eight-week-old female Sprague-Dawley rats weighing 200 to 250 g ^[3] Dosage:20 mg/kgAdministration:Oral gavage; 20 mg/kg; once daily; 7 weeksResult:Gained significantly less weight (P = 0.031), had a lower level of physical activity (P = 0.016), showed a higher resting energy expenditure (P < 0.001), and displayed a greater		Result:				
Dosage: 20 mg/kg Administration: Oral gavage; 20 mg/kg; once daily; 7 weeks Result: Gained significantly less weight (P = 0.031), had a lower level of physical activity (P = 0.016), showed a higher resting energy expenditure (P < 0.001), and displayed a greater	In Vivo	activity, high resting energy expenditure and greater capacity for thermogenesis when subjected to cold ^[3] .				
Administration:Oral gavage; 20 mg/kg; once daily; 7 weeksResult:Gained significantly less weight (P = 0.031), had a lower level of physical activity (P = 0.016), showed a higher resting energy expenditure (P < 0.001), and displayed a greater		Animal Model:	Eight-week-old female Sprague-Dawley rats weighing 200 to 250 $\mathrm{g}^{[3]}$			
Result:Gained significantly less weight (P = 0.031), had a lower level of physical activity (P = 0.016), showed a higher resting energy expenditure (P < 0.001), and displayed a greater		Dosage:	20 mg/kg			
0.016), showed a higher resting energy expenditure (P < 0.001), and displayed a greater		Administration:	Oral gavage; 20 mg/kg; once daily; 7 weeks			
		Result:	0.016), showed a higher resting energy expenditure (P < 0.001), and displayed a greater			

CUSTOMER VALIDATION

• Research Square Preprint. 2021 Jul.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. H Rollema, et al. 5-HT(1A) receptor activation contributes to ziprasidone-induced dopamine release in the rat prefrontal cortex. Biol Psychiatry. 2000 Aug 1;48(3):229-37.

[2]. Zhi Su, et al. Block of hERG channel by ziprasidone: biophysical properties and molecular determinants. Biochem Pharmacol. 2006 Jan 12;71(3):278-86.

[3]. Subin Park, et al. The effect of ziprasidone on body weight and energy expenditure in female rats. Metabolism. 2012 Jun;61(6):787-93.

Caution: Product has not been fully validated for medical applications. For research use only.

 Tel: 609-228-6898
 Fax: 609-228-5909
 E-mail: tech@MedChemExpress.com

 Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA