



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC Handels GmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

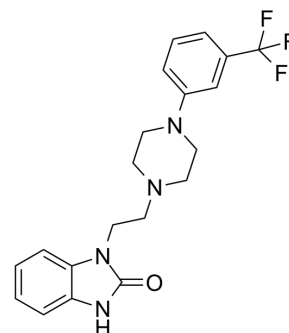
mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

Flibanserin

Cat. No.:	HY-A0095		
CAS No.:	167933-07-5		
Molecular Formula:	C ₂₀ H ₂₁ F ₃ N ₄ O		
Molecular Weight:	390.4		
Target:	5-HT Receptor		
Pathway:	GPCR/G Protein; Neuronal Signaling		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro	DMSO : 50 mg/mL (128.07 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
		1 mM		2.5615 mL	12.8074 mL	25.6148 mL
		5 mM		0.5123 mL	2.5615 mL	5.1230 mL
		10 mM		0.2561 mL	1.2807 mL	2.5615 mL
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (6.40 mM); Clear solution					
	2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (6.40 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	Flibanserin (BIMT-17; BIMT-17BS) is an orally active serotonin 5-HT _{1A} receptor agonist and 5-HT _{2A} receptor antagonist with K _i values of 1 nM and 49 nM, respectively. Flibanserin binds to dopamine D ₄ receptors with an K _i value of 4-24 nM. Flibanserin shows anti-depression and anti-anxiety effect, can be used to hypoactive sexual desire disorder (HSDD) research [1]-[5].		
IC ₅₀ & Target	5-HT _{1A} Receptor 1 nM (K _i)	5-HT _{2A} Receptor 49 nM (K _i)	dopamine D ₄ receptors 4-24 nM (K _i)
In Vitro	Flibanserin (0.01-100 μM; 72 h) can transform into two degradation products DP1 and DP2 with no toxicity potential after oxidative degradation ^[1] .		

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay^[1]

Cell Line:	NHSF cell lin
Concentration:	0.01, 0.1, 1, 10, 100 μ M
Incubation Time:	72 hours
Result:	Resulted cell viability reached to 97.91% (DP1) and 96.73% (DP2) at 0.01 μ M. Showed non-toxic up to 100 μ M (IC ₅₀ >100 μ M).

In Vivo

Flibanserin (1, 10, 30 mg/kg; i.p.; single dose) shows different pharmacological properties in prefrontal cortex, hippocampus and midbrain. The 5-HT_{1A} receptor occupancy in cortex indicates it's the more sensitive than other brain region^[2].
Flibanserin (15, 45 mg/kg; p.o.; twice a day; 22 d) preferentially activates the brain regions belonging to the mesolimbic dopaminergic pathway and hypothalamic structures involved in the integration of sexual cues related to sexual motivation^[3].

Flibanserin (5, 10, 25, and 50 mg/kg; s.c.; single dose) has anxiolytic effects without locomotor side effects in rat ultrasonic vocalization model^[4].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Long Evans female rats (225-250 g) ^[3]
Dosage:	15 mg/kg; 45 mg/kg
Administration:	Oral gavage; twice a day for 22 days
Result:	Increased the density of activated catecholaminergic neurons in the ventral tegmental area but not in the locus coeruleus. Increased Fos expression in the medial preoptic area and arcuate nucleus of the hypothalamus, ventral tegmental area, locus coeruleus, and lateral paraventricular nucleus with chronic 22-day treatment.

Animal Model:	Rat pup ultrasonic vocalization model of anxiety ^[4]
Dosage:	5, 10, 25, and 50 mg/kg
Administration:	Subcutaneous injection
Result:	Reduced ultrasonic vocalizations in rat pups. Showed effective within 30 min and has no severe locomotor side effects at active doses.

CUSTOMER VALIDATION

- Mol Pharmacol. 2023 Nov;104(5):230-238.
- Authorea. 2023 Apr 17.

See more customer validations on www.MedChemExpress.com

REFERENCES

-
- [1]. Fayed M, et al. Insights into Flibanserin Oxidative Stress Degradation Pathway: In Silico – In Vitro Toxicity Assessment of Its Degradates[J]. New Journal of Chemistry, 2021.
- [2]. Invernizzi RW, et al. A potential antidepressant drug, lowers 5-HT and raises dopamine and noradrenaline in the rat prefrontal cortex dialysate: role of 5-HT(1A) receptors. Br J Pharmacol. 2003 Aug;139(7):1281-8.
- [3]. Gelez H, et al. Brain neuronal activation induced by flibanserin treatment in female rats. Psychopharmacology (Berl). 2013 Dec;230(4):639-52.
- [4]. Podhorna J, et al. Flibanserin has anxiolytic effects without locomotor side effects in the infant rat ultrasonic vocalization model of anxiety. Br J Pharmacol. 2000 Jun;130(4):739-46.
- [5]. Gelman F, et al. Flibanserin for hypoactive sexual desire disorder: place in therapy. Ther Adv Chronic Dis. 2017 Jan;8(1):16-25.
-

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