
Product Data Sheet

Product Name: Flibanserin-d4-1

Cat. No.: GC68364

Chemical Properties

Cas. No. 2122830-91-3

Formula C₂₀H₁₇D₄F₃N₄O

M.Wt

394.43

Solubility

Storage

Store at -20°C

General tips

For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure

Background

Flibanserin-d4-1 is deuterium labeled Flibanserin. Flibanserin (BIMT-17) is a full agonist of the serotonin 5-HT_{1A} receptor (K_i=1 nM) and an antagonist of 5-HT_{2A} (49 nM). Flibanserin binds to dopamine D₄ receptors (4-24 nM), and has negligible affinity for a variety of other neurotransmitter receptors and ion channels. Flibanserin is efficacious in treating hypoactive sexual desire disorder (HSDD)^{[1][2]}.

Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs^[1].

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.

[2]. Gelman F, et al. Flibanserin for hypoactive sexual desire disorder: place in therapy. *Ther Adv Chronic Dis.* 2017 Jan;8(1):16-25.

[3]. Invernizzi RW, et al. Flibanserin, 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.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

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