



Product Information

Product ID V5870

CAS No. 508233-74-7

Chemical Name

Synonym Lu AA21004

Formula $C_{18}H_{22}N_2S$

Formula Wt. 298.45

Melting Point

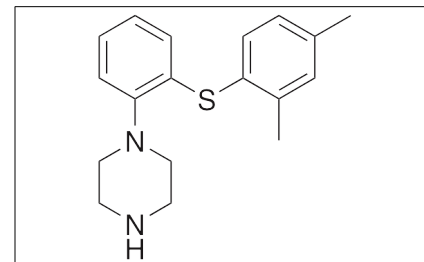
Purity $\geq 98\%$

Solubility

Store Temp Ambient

Ship Temp Ambient

Description Vortioxetine exhibits neuromodulatory, antidepressant, anxiolytic, and cognition enhancing activities. Vortioxetine modulates serotonin levels in the brain by inhibiting the serotonin transporter (SERT) and 5-HT_{3A/7} receptors, acting as a partial agonist at the 5-HT_{1B} receptor, and acting as a full agonist at the 5-HT_{1A} receptor. Vortioxetine also shows some agonist activity at β ₁-adrenergic receptors, although this is likely not related to its beneficial activities. In addition to its mood-modulating action, this compound also improves memory performance and reduces 5-HT-depletion-induced memory deficits in object recognition and Y-maze spontaneous alternation tests.



Bulk quantities available upon request

Product ID	Size
V5870	5 mg
V5870	10 mg
V5870	25 mg
V5870	100 mg

References du Jardin KG, Jensen JB, Sanchez C, et al. Vortioxetine dose-dependently reverses 5-HT depletion-induced deficits in spatial working and object recognition memory: A potential role for 5-HT_{1A} receptor agonism and 5-HT₃ receptor antagonism. *Eur Neuropsychopharmacol.* 2013 Aug 2. [Epub ahead of print]. PMID: 23916504.

Henigsberg N, Mahableshwarkar AR, Jacobsen P, et al. A randomized, double-blind, placebo-controlled 8-week trial of the efficacy and tolerability of multiple doses of Lu AA21004 in adults with major depressive disorder. *J Clin Psychiatry.* 2012 Jul;73(7):953-9. PMID: 22901346.

Bang-Andersen B, Ruhland T, Jørgensen M, et al. Discovery of 1-[2-(2,4-dimethylphenylsulfanyl)phenyl]piperazine (Lu AA21004): a novel multimodal compound for the treatment of major depressive disorder. *J Med Chem.* 2011 May 12;54(9):3206-21. PMID: 21486038.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.