



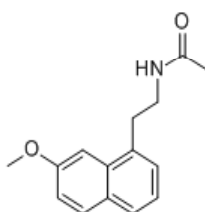
Product Data Sheet

Product Name: Agomelatine

CAS No.: 138112-76-2

Cat. No.: CS-0740

Structure



MWt: 243.30

Formula: C₁₅H₁₇NO₂

Solubility: DMSO ≥49mg/mL Water <1mg/mL Ethanol ≥49mg/mL

Purity : >98%

Biological Activity:

Agomelatine is a competitive antagonist of human and porcine serotonin (5-HT_{2C}) receptors (pK_i = 6.2 and 6.4, respectively) as well as human 5-HT_{2B} receptors (pK_i = 6.6).

IC₅₀ value:

Target: 5-HT_{2C} Receptor; 5-HT_{2B} receptor

It is classified as a norepinephrine-dopamine disinhibitor (NDDI) due to its antagonism of the 5-HT_{2C} receptor. Activation of 5-HT_{2C} receptors by serotonin inhibits dopamine and norepinephrine release. Antagonism of 5-HT_{2C} results in an enhancement of DA and NE release and activity of

References:

- [1]. Zajecka J, Schatzberg A, Stahl S. et al. Efficacy and safety of agomelatine in the treatment of major depressive disorder: a multicenter, randomized, double-blind, placebo-controlled trial. *J Clin Psychopharmacol.* 2010 Apr;30(2):135-44.
- [2]. Randy A Sansone, Lori A Sansone. Agomelatine A Novel Antidepressant. *Innov Clin Neurosci.* 2011 November; 8(11): 10-14.
- [3]. Michele Fornaro, Davide Prestia, Salvatore Colicchio, and Giulio Perugi. A Systematic, Updated Review on the Antidepressant Agomelatine Focusing on its Melatonergic Modulation. *Curr Neuropharmacol.* 2010 September; 8(3): 287-304.
- [4]. Agomelatine
- [5]. Pan L, Kardono LB, Riswan S, Chai H, Carcache de Blanco EJ, Pannell CM, Soejarto DD, McCloud TG, Newman DJ, Kinghorn AD. Isolation and characterization of minor analogues of silvestrol and other constituents from a large-scale re collection of

Caution: Not fully tested. For research purposes only

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