

# Agomelatine

Catalog No: tcsc0740



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



## Specifications

**CAS No:**

138112-76-2

**Formula:**

$C_{15}H_{17}NO_2$

**Pathway:**

Neuronal Signaling;GPCR/G Protein

**Target:**

5-HT Receptor;5-HT Receptor

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 100$  mg/mL (411.02 mM)

**Alternative Names:**

S-20098

**Observed Molecular Weight:**

243.3

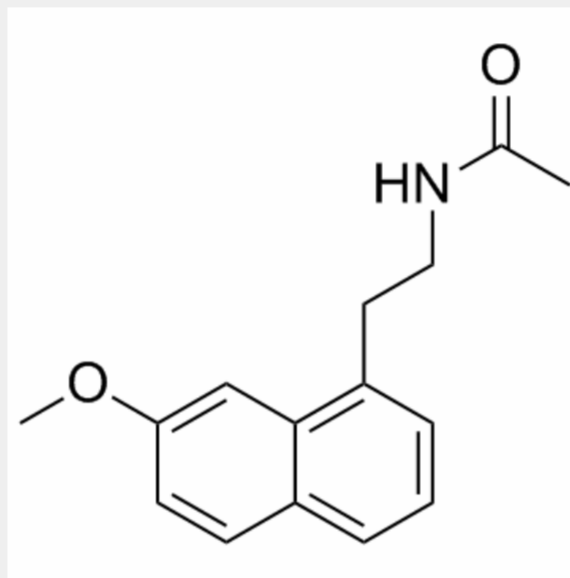
## Product Description

Agomelatine is a competitive antagonist of human and porcine serotonin (5-HT<sub>2C</sub>) receptors ( $pK_i$  = 6.2 and 6.4, respectively) as well as human 5-HT<sub>2B</sub> receptors ( $pK_i$  = 6.6).

IC<sub>50</sub> value: 6.2 ( $pK_i$ , 5-HT<sub>2c</sub>); 6.6 ( $pK_i$ , 5-HT<sub>2b</sub>)

Target: 5-HT<sub>2C</sub> Receptor; 5-HT<sub>2B</sub> receptor

It is classified as a norepinephrine-dopamine disinhibitor (NDDI) due to its antagonism of the 5-HT<sub>2C</sub> receptor. Activation of 5-HT<sub>2C</sub> receptors by serotonin inhibits dopamine and norepinephrine release. Antagonism of 5-HT<sub>2C</sub> results in an enhancement of DA and NE release and activity of frontocortical dopaminergic and adrenergic pathways. Agomelatine is also a potent agonist at melatonin receptors which makes it the first melatonergic antidepressant. Agomelatine is an antidepressant drug.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!