Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Agomelatine (hydrochloride)

Catalog No: tcsc1779

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
1176316-99-6

Formula:
$C_{15}H_{18}ClNO_2$

Pathway:
Neuronal Signaling;GPCR/G Protein

Target:
5-HT Receptor;5-HT Receptor

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 100 mg/mL (357.45 mM)

Alternative Names:
S-20098 hydrochloride

Observed Molecular Weight:
279.76

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Product Description

Agomelatine hydrochloride is a antidepressant, which is classified as a norepinephrine-dopamine disinhibitor (NDDI) due to its antagonism of the 5-HT2C receptor.

IC50 value: 6.2 (pKi, 5-HT2c); 6.6 (pKi, 5-HT2b)

Target: 5-HT 2c receptor

Agomelatine hydrochloride is an antidepressant drug. It is classified as a norepinephrine-dopamine disinhibitor (NDDI) due to its antagonism of the 5-HT2C receptor. Activation of 5-HT2C receptors by serotonin inhibits dopamine and norepinephrine release. Antagonism of 5-HT2C results in an enhancement of DA and NE release and activity of frontocortical dopaminergic and adrenergic pathways [1].

A total of 42 rats were divided into 7 groups as each composed of 6 rats: (1) intact, (2) 40 mg/kg agomelatine, (3) 140 mg/kg N-acetylcysteine (NAC), (4) 2 g/kg paracetamol, (5) 2 g/kg paracetamol + 140 mg/kg NAC, (6) 2 g/kg paracetamol + 20 mg/kgagomelatine, and (7) 2 g/kg paracetamol + 40 mg/kg agomelatine groups. Paracetamol-induced hepatotoxicity was applied and liver and blood samples were analyzed histopathologically and biochemically. There were statistically significant increases in the activities of aspartate aminotransferase, alanine aminotransferase, levels of tumor necrosis factor-alpha (TNF-α) and interleukin-6 (IL-6) and 8-iso-prostane, and decreases in the activity of superoxide dismutase and level of glutathione in the group treated with paracetamol. Administration of agomelatine and NAC separately reversed these changes significantly [2].

Clinical indications: Depression; Obsessive compulsive disorder

FDA Approved Date: October 2011

Toxicity: Hyperhidrosis; Abdominal pain; Nausea; Vomiting; Diarrhoea; Constipation; Back pain; Fatigue