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

Moclobemide

Catalog No: tcsc2628

Available Sizes

Size: 50mg

Size: 100mg

Specifications

CAS No:
71320-77-9

Formula:
$C_{13}H_{17}ClN_2O_2$

Pathway:
Neuronal Signaling

Target:
Monoamine Oxidase

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Alternative Names:
Ro111163

Observed Molecular Weight:
268.74

Product Description

Moclobemide(Ro111163) is a reversible monoamine oxidase inhibitor (MAOI) selective for isoform A (RIMA) used to treat major depressive disorder.

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

Target: Monoamine Oxidase

Moclobemide orally administered 2 hours before decapitation preferentially inhibits MAO-A and PEA in rat brain with ED50 of 7.6 μmol/kg and 78 μmol/kg, respectively. Moclobemide orally administered 2 hours before decapitation preferentially inhibits MAO-A and PEA in rat liver with ED50 of 8.4 μmol/kg and 6.6 μmol/kg, respectively. Moclobemide (0.1 mM), which inhibits brain MAO-A activity by over 80%, does not affect benzylamine oxidase (rat heart) and diamine oxidase (rat small intestine) activity in vitro [1]. Moclobemide (10 mM-100 mM) includes in the culture medium during anoxia or with glutamate significantly increases in a concentration-dependent manner the amount of surviving neurons compared to controls in neuronal-astroglial cultures from rat cerebral cortex [2].

Moclobemide (10 mg/kg p.o.) induces a significant decrease of all monoamine metabolites measured in rat brain [1]. Moclobemide, given via the drinking water (4.5 mg/kg/day), produces significant decreases in adrenal weight of rats after 5 (-23%) and 7 weeks (-16%) of treatment. Moclobemide upregulates hippocampal mineralocorticoid receptor (MR) levels in rats by 65%, 76% and 19% at 2 weeks, 5 weeks and 7 weeks of treatment, and upregulates Glucocorticoid receptor (GR) levels in this limbic brain structure by 10% at 5 weeks. Moclobemide treatment (5 weeks, 4.5 mg/kg/day) significantly attenuates stress (30 min novel environment)-induced plasma ACTH (-35%) and corticosterone (-29%) levels [3].