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

WAY-100635

Catalog No: tcsc0418

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
162760-96-5

Formula:
$C_{25}H_{34}N_4O_2$

Pathway:
Neuronal Signaling;GPCR/G Protein

Target:
5-HT Receptor;5-HT Receptor

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Observed Molecular Weight:
422.56

Product Description

WAY-100635 is a potent and selective 5-HT_{1A} Receptor antagonist with a pIC_{50} of 8.87, an apparent pA_2 of 9.71.

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IC50 & Target: pIC50 Value: 8.87 (5-HT_{1A} Receptor)[1].

In Vitro: WAY-100635 is a potent and, at high concentrations, an insurmountable antagonist of the 5-HT_{1A} receptor agonist action of 5-carboxamidotryptamine, with an apparent pA_2 value (at 0.3 nM) of 9.71. WAY-100635 displaces specific binding of the 5-HT_{1A} radioligand, [^{3}H]8-OH-DPAT (8-hydroxy-2-(di-n-propylamino)tetralin), to rat hippocampal membranes with a pIC_{IC50} of 8.87[1].

In Vivo: Administration of (S)-WAY-100135 (0.025-1.0 mg/kg i.v.) moderately depresses neuronal activity at all doses tested. In contrast, administration of WAY-100635 (0.025-0.5 mg/kg i.v.) significantly increases neuronal activity. The stimulatory action of WAY-100635, like that of spiperone, is evident during wakefulness but not during sleep. Pretreatment with (S)-WAY-100135 (0.5 mg/kg i.v.) weakly attenuates the inhibitory action of 8-hydroxy-2-(di-n-propylamino) tetralin. In contrast, WAY-100635 at doses as low as 0.1 mg/kg i.v. completely blockes the action of 8-hydroxy-2-(di-n-propylamino) tetralin. The antagonist action of WAY-100635 at 5-HT_{1A} autoreceptors closely parallels its ability to increase neuronal activity. Overall, WAY-100635 appears to act as a selective 5-HT1A antagonist, whereas (S)-WAY-100135 does not. The results obtained with WAY-100635 confirm our previous findings obtained with spiperone and further support the hypothesis that 5-HT_{1A} autoreceptor-mediated feedback inhibition operates under physiological conditions[2].