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

Opicapone

Catalog No: tcsc3109

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Specifications

CAS No:
923287-50-7

Formula:
$C_{15}H_{10}Cl_2N_4O_6$

Pathway:
Neuronal Signaling;Metabolic Enzyme/Protease

Target:
COMT;COMT

Purity / Grade:
>98%

Solubility:
DMSO : 1.25 mg/mL (3.03 mM; Need ultrasonic and warming)

Alternative Names:
BIA 9-1067

Observed Molecular Weight:
413.17

Product Description

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Opicapone is an available catechol-O-methyltransferase (**COMT**) inhibitor. Opicapone decreases the ATP content of the cells with IC_{50} values of 98 μM.

IC50 & Target: COMT[1]

In Vitro: Opicapone has a prolonged inhibitory effect on peripheral COMT, which extends the bioavailability of levodopa, without inducing toxicity. Opicapone decreases the ATP content of the cells with IC_{50} values of 98 μM. Incubation of human primary hepatocytes for 24 h with increasing concentrations of Tolcapone, entacapone or Opicapone resulted in a concentration-dependent decrease in the mitochondrial membrane potential of the cells, evaluated by the ratio JC-1 aggregates over JC-1 monomer (ratio λ_{ex} 544 λ_{em} 590 over λ_{ex} 485 λ_{em} 538). Opicapone decreases the mitochondrial membrane potential of the cells with IC_{50} of 181 μM[1].

In Vivo: Opicapone inhibits rat peripheral COMT with ED_{50} values below 1.4 mg/kg up to 6 h post-administration. The effect is sustained over the first 8 h and by 24 h COMT had not returned to control values. A single administration of Opicapone resulted in increased and sustained plasma levodopa levels with a concomitant reduction in 3-O-methyldopa from 2 h up to 24 h post-administration, while Tolcapone produced significant effects only at 2 h post-administration. The effects of Opicapone on brain catecholamines after levodopa administration are sustained up to 24 h post-administration. Opicapone is also the least potent compound in decreasing both the mitochondrial membrane potential and the ATP content in human primary hepatocytes after a 24 h incubation period[1].