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

ZD7288

Catalog No: tcsc0021189

Available Sizes

Size: 5mg

Size: 10mg

Specifications

CAS No:
133059-99-1

Formula:
$C_{15}H_{21}ClN_4$

Pathway:
Membrane Transporter/Ion Channel

Target:
HCN Channel

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Alternative Names:
ICI D7288

Observed Molecular Weight:
292.81

Product Description

ZD7288 is a selective hyperpolarization-activated cyclic nucleotide-gated (**HCN**) channel blocker.

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IC50 & Target: HCN channel[1]

In Vitro: ZD7288 is a selective hyperpolarization-activated cyclic nucleotide-gated (HCN) channel blocker. ZD7288 inhibits glutamate release in a concentration-dependent manner. After incubation with 1, 5 and 50 μM ZD7288 for 24 hours, glutamate content in extracellular fluid is decreased to 69.0±2.8%, 31.4±2.0% and 4.4±0.3%, respectively $(P2+]_i$ rises are attenuated to 59.2±2.7%, 41.4±2.3% and 21.0±1.4%, respectively glutamate (P[1].

In Vivo: Application of ZD7288 0.1 μM at 5 minutes before high-frequency stimulation significantly decreases the amplitude of field excitatory postsynaptic potentials (fEPSPs), and this inhibitory effect is maintained throughout the recording period. Application of 0.1 μM ZD7288 30 minutes after high-frequency stimulation almost completely reverses the established long-term potentiation (LTP). Following application of ZD7288 (0.1 μM) 5 minutes before high-frequency stimulation, glutamate content is reduced to 74.9±8.0% (P[1].