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

MDL-29951

Catalog No: tcsc1958

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
130798-51-5

Formula:
$C_{12}H_9Cl_2NO_4$

Pathway:
Membrane Transporter/Ion Channel;Neuronal Signaling

Target:
iGluR;iGluR

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Observed Molecular Weight:
302.11

Product Description

MDL-29951 is a novel glycine antagonist of **NMDA receptor** activation, with $\mathbf{K_i}$ of 0.14 μM for [^{3}H]glycine binding in vitro and in vivo.

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

IC50 & Target: Ki: 0.14 μM

In Vitro: MDL 100,748 and MDL 29,951 are approximately 2000-fold selective for the glycine binding site relative to the glutamate recognition sites[1]. MDL-29951 is found to inhibit the human F16Bpase under these conditions (IC_{50}=2.5 μM). MDL-29951 inhibits the human liver (IC_{50}=2.5 μM), porcine kidney (IC_{50}=1.0 μM), and rabbit liver (IC_{50}=0.21 μM) isoforms of the enzyme, but is significantly less potent against the rat liver isoform (IC_{50}=11 μM)[2]. The MDL29951-activated receptor exhibits other activities associated with GPCR-mediated signaling, including G protein-dependent activation of extracellular signal-regulated kinase 1 and 2 (ERK1/2) and recruitment of β-arrestin. As with recombinant cell systems, MDL29951 promotes Ca^{2+} signaling responses and inhibition of cyclic adenosine monophosphate (cAMP) accumulation in rat oligodendrocyte precursor cells during the period of peak GPR17 abundance. Effects of MDL29951 are markedly reduced in cells with low GPR17 abundance and are blocked by pranlukast[3].