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

ML213

Catalog No: tcsc6933

Available Sizes

Size: 5mg

Size: 10mg

Size: 25mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
489402-47-3

Formula:
$C_{17}H_{23}NO$

Pathway:
Membrane Transporter/Ion Channel

Target:
Potassium Channel

Purity / Grade:
>98%

Solubility:
DMSO : 30 mg/mL (116.56 mM; Need ultrasonic and warming)

Observed Molecular Weight:
257.37

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Product Description

ML213 is a selective activator of **Kv7.2** and **Kv7.4** channels, enhances Kv7.2 and Kv7.4 channels with **EC_{50}s** of 230 and 510 nM, respectively.

IC50 & Target: EC50: 230 nM (Kv7.2 channel), 510 nM (Kv7.4 channel)[2][3]

In Vitro: ML213 (100 nM-30 μM) increases maximal conductance to a peak at 212% ± 27% of control, with an EC_{50} of 0.8 ± 0.3 μM. ML213 (10 μM) reduces the deactivation rates of Kv7.4 currents by 4.6-fold in the voltage range from −130 mV to −90 mV. ML213 is a potent and effective activator of homomeric Kv7.5 channels overexpressed in A7r5 cells. ML213 increases maximal conductance of Kv7.5 channels with an EC_{50} of 0.7 ± 0.2 μM. ML213 (10 μM) also reduces deactivation rates of Kv7.5 currents by 5.9-fold on average. ML213 produces similar effects on heteromeric Kv7.4/7.5 channels: 204% ± 11% maximal increase in conductance with an EC_{50} of 1.1 ± 0.6 μM and a 34.2 ± 3.3 mV maximal negative shift of the activation curve, with an EC_{50} of 3.8 ± 1.2 μM[1]. ML213 causes a vasorelaxation in different precontracted rat blood vessels. ML213 (10 μM) also hyperpolarizes mesenteric artery smooth muscle cells[2]. ML213 causes a concentration-dependent shift in the V1/2 for KCNQ2 activation with an EC_{50} 340 ± 70 nM and a maximal shift of 37.4 mV[3].