## For Research Use Only Naspm trihydrochloride



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Catalog Number: CM09834

产品信息

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CAS号: 1049731-36-3

分子式:  $C_{22}H_{37}Cl_3N_4O$ 主要靶点: iGluR

**主要通路:** 离子通道|神经科学 分子量: 479.91 溶解度:

H20:50 mg/mL (104.19 mM),Sonification is recommended.,DMSO:6.4 mg/mL (13.34 mM),Sonification is

recommended.

靶点活性

AMPAR:0.33  $\,\mu$  M

体外活性

NASPM selectively suppressed the inwardly rectifying and Ca(2+)-permeable AMPA receptors expressed in type II neurons. It had no effect on AMPA receptors in type I neurons. The blocking effect of NASPM on the Ca(2+)-permeable AMPA receptors was use and voltage-dependent. When the effect of NASPM reached a steady state, current responses induced by ionophoretic applications of kainate, a non-desensitizing agonist of AMPA receptors, in type II neurons were suppressed by NASPM in a dose-dependent manner at -60 mV (IC50 0.33 microM, and Hill coefficient 0.94). The response to kainate recovered partially after washing out NASPM. NASPM did not affect the Ca(2+)-permeable AMPA receptors when the neuronal membrane was held at potentials more positive than +40 mV. Furthermore, the blockade by NASPM which was attained at negative potentials was transiently removed by shifting membrane potential to +60 mV for 5 s together with a single ionophoretic application of kainate

描述

Naspm trihydrochloride is a synthetic analogue of Joro spider toxin and is an antagonist of calcium permeable AMPA (CP-AMPA) receptors.

储存

Powder: -20°C for 3 years | In solvent: -80°C for 2 years