Web: www.taiclone.com
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PEAQX (tetrasodium hydrate)

Catalog No: tcsc3383

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Specifications

Formula:
$C_{17}H_{15}BrN_3Na_4O_6P$

Pathway:
Membrane Transporter/Ion Channel;Neuronal Signaling

Target:
iGluR;iGluR

Purity / Grade:
>98%

Solubility:
H2O : 25.5 mg/mL (45.52 mM; Need ultrasonic and warming)

Alternative Names:
NVP-AAM077 tetrasodium hydrate

Observed Molecular Weight:
560.15

Product Description

PEAQX(NVP-AAM 077) is a potent and orally active NMDA antagonist with a 15-fold preference for human NMDA receptors with the 1A/2A(IC50=270 nM), rather than 1A/2B(29,600 nM).

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IC50 value: 270 nM(hNMDA A1/A2) [1]

Target: NR2A antagonist

in vitro: PEAQX has a high binding affinity for NMDA receptors (IC50=8 nM), and a functional preference in excess of 100-fold for hNMDA 1A/2A (IC50=of 270 nM) over 1A/2B receptors (IC50=29,600 nM) [1].

in vivo: PEAQX is practically inactive in Xenopus oocytes expressing hNMDA 1A/2B receptors, displays an ED50 value of 23 mg/kg in the MES test [1]. Sprague-Dawley rats were treated on PN7, PN9, and PN11 with PCP (10 mg/kg), PEAQX (NR2A-preferring antagonist; 10, 20, or 40 mg/kg), or ifenprodil (selective NR2B antagonist; 1, 5, or 10 mg/kg) and sacrificed for measurement of caspase-3 activity (an index of apoptosis) or allowed to age and tested for locomotor sensitization to PCP challenge on PN28-PN35. PCP or PEAQX on PN7, PN9, and PN11 markedly elevated caspase-3 activity in the cortex; ifenprodil showed no effect. Striatal apoptosis was evident only after subchronic treatment with a high dose of PEAQX (20 mg/kg). Animals treated with PCP or PEAQX on PN7, PN9, and PN11 showed a sensitized locomotor response to PCP challenge on PN28-PN35 [2].