

ProductInformation

Ro 8-4304

Product Number **R8900** Storage Temperature: 4°C

Synonym: 4-{3-[4-(4-fluorophenyl)-3,6-dihydro-2H-pyridin-1-yl]-2-hydroxy-propoxy}-benzamide

Product Description

Molecular Formula: C₂₁H₂₃FN₂O₃•HCl Molecular Weight: 406.88 (anhyd.)

The N-methyl-D-aspartate (NMDA) subtype of ionotropic glutamate receptors is a hetero-oligomer consisting of an NR1 subunit combined with one or more NR-2 (A-D) subunits. The receptor has two amino acid recognition sites, one for glutamate and one for glycine, and selective antagonists have been discovered for each site. These compounds act as functional antagonists since activation of both the glutamate and glycine site is required for ion channel

opening. The channel is permeable to cations, including calcium, and blocked by magnesium at membrane potentials close to the resting potential, endowing a large voltage dependence to this ligand-gated ion channel that is important for its physiological role as a "conditional" receptor. A variety of drugs have been identified that selectively block the ion channel..

Ro 8-4304 is a noncompetitive NMDA receptor antagonist that is selective for the NR2B subunit.

Preparation Instructions

Soluble in water (0.5 mg/ml).

Storage/Stability

Store tightly sealed at 4°C.

References

- 1. Lloyd, G.K. et al., J. Pharmacol. Exp. Ther., **292**, 461-67 (2000).
- 2. Ghelardini, C. et al., Drug Dev. Res., **40**, 251-258 (1997).

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