

Product data sheet



MedKoo Cat#: 533725 Name: Ro 04-5595 HCl CAS#: 64047-73-0 (HCl) Chemical Formula: C ₁₉ H ₂₃ Cl ₂ NO ₂ Molecular Weight: 368.30	
Product supplied as: Powder	
Purity (by HPLC): ≥ 98%	
Shipping conditions: Ambient temperature	
Storage conditions: Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.	

1. Product description:

Ro 04-5595 hydrochloride is a selective antagonist for GluN2B (formally NR2B) containing NMDA receptors (K_i = 31 nM).

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
To be determined	To be determined	To be determined

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.72 mL	13.58 mL	27.15 mL
5 mM	0.54 mL	2.72 mL	5.43 mL
10 mM	0.27 mL	1.36 mL	2.72 mL
50 mM	0.05 mL	0.27 mL	0.54 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

- Fjellidal MF, Freyd T, Evenseth LM, Sylte I, Ring A, Paulsen RE. Exploring the overlapping binding sites of ifenprodil and EVT-101 in GluN2B-containing NMDA receptors using novel chicken embryo forebrain cultures and molecular modeling. *Pharmacol Res Perspect.* 2019 May 30;7(3):e00480. doi: 10.1002/prp.2480. PMID: 31164987; PMCID: PMC6543015.
- Bergeron S, Rompré PP. Blockade of ventral midbrain NMDA receptors enhances brain stimulation reward: a preferential role for GluN2A subunits. *Eur Neuropsychopharmacol.* 2013 Nov;23(11):1623-35. doi: 10.1016/j.euroneuro.2012.12.005. Epub 2013 Jan 23. PMID: 23352316.

In vivo study

To be determined

7. Bioactivity

Biological target:

Ro 04-5595 has an EC 50 of 186 ± 32 nmol/L. Ro 04-5595 was predicted to bind the EVT-101 binding site. Ro 04-5595 hydrochloride is a selective antagonist for GluN2B containing NMDA receptors (K_i = 31 nM).

In vitro activity

This study used primary cultures from chicken embryo forebrain, expressing native GluN2B-containing NMDA receptors. Ro 04-5595 had an EC 50 of 186 ± 32 nmol/L and was predicted to bind the EVT-101 binding site, not the ifenprodil-binding site.

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Reference: Pharmacol Res Perspect. 2019 May 30;7(3):e00480. <https://pubmed.ncbi.nlm.nih.gov/31164987/>

In vivo activity

To be determined

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.