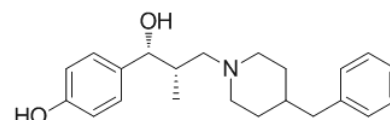


Product Data Sheet

Chemical Properties

Product Name:	Ro 25-6981
Cas No.:	169274-78-6
M.Wt:	339.47
Formula:	C ₂₂ H ₂₉ NO ₂



Chemical Name:	4-((1R,2S)-3-(4-benzylpiperidin-1-yl)-1-hydroxy-2-methylpropyl)phenol
Canonical SMILES:	<chem>C[C@@]([C@](O)([H])C1=CC=C(O)C=C1)([H])CN2CCC(CC3=CC=CC=C3)CC2</chem>
Solubility:	Soluble in DMSO
Storage:	Store at -20°C
General tips:	For obtaining a higher solubility , please warm the tube at 37° C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20° C for several months.
Shopping Condition:	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request

Biological Activity

Targets : Membrane Transporter/Ion Channel

Pathways: NMDA Receptor

Description:

Ro 25-6981 is a high-affinity, potent and selective blocker of N-methyl- D-aspartate (NMDA) receptors[1].

Ro 25-6981 has shown a biphasic concentration-effect relationship in inhibiting 3H-MK-801

binding to rat forebrain membranes with the mean Kd values of 0.003 μ M and 149 μ M for the high-affinity binding and the low-affinity binding, respectively. In addition, the IC50 values of Ro 25-6981 for antagonism of the NR1C & NR2B, NR1F & NR2B and NR1C & NR2A receptors are 0.009 μ M, 0.017 μ M and 52 μ M, respectively. Moreover, Ro 25-6981 has been revealed to protect the neurons in concentration-dependent fashion in both two toxicity tests with the IC50 values of 0.4 μ M in the glutamate toxicity test and 0.04 μ M in the OGD test[1].

Reference:

[1] Fischer G1, Mutel V, Trube G, Malherbe P, Kew JN, Mohacsi E, Heitz MP, Kemp JA. Ro 25-6981, a highly potent and selective blocker of N-methyl-D-aspartate receptors containing the NR2B subunit. Characterization in vitro. *J Pharmacol Exp Ther.* 1997 Dec;283(3):1285-92.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most ApexBio products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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