PRODUCT INFORMATION



Ro 67-7476

Item No. 11993

CAS Registry No.:		
Formal Name:	2S-(4-fluorophenyl)-1-[(4-	
	methylphenyl)sulfonyl]-pyrrolidine	
MF:	$C_{17}H_{18}FNO_2S$, ∽, ∽, F
FW:	319.4	
Purity:	≥98%	
UV/Vis.:	λ_{max} : 231 nm	
Supplied as:	A crystalline solid	
Storage:	-20°C	
Stability:	≥4 years	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

Laboratory Procedures

Ro 67-7476 is supplied as a crystalline solid. A stock solution may be made by dissolving the Ro 67-7476 in the solvent of choice, which should be purged with an inert gas. Ro 67-7476 is soluble in the organic solvent DMSO at a concentration of approximately 30 mg/ml.

Description

Ro 67-7476 is a positive allosteric modulator of metabotropic glutamate receptor 1 (mGluR1) that enhances glutamate-induced calcium release in HEK293 cells expressing rat mGluR1a $(EC_{50} = 1.74 \mu M)$.¹ It is selective for rat mGluR1 over rat mGluR2, mGluR4, and mGluR8 at a concentration of 10μ M. Ro 67-7476 increases the amplitude of mGluR1 excitatory postsynaptic potentials (EPSCs) evoked by 2,3-dihydroxy-6-nitro-7-sulfamoylbenzoquionxaline, picrotoxin, or AP5 in the Purkinje cells of rat cerebellar slices. It activates ERK1/2 phosphorylation in the absence of exogenously added glutamate (EC₅₀ = 163.3 nM).²

References

- 1. Knoflach, F., Mutel, V., Jolidon, S., et al. Positive allosteric modulators of metabotropic glutamate 1 receptor: Characterization, mechanism of action, and binding site. Proc. Natl. Acad. Sci. U.S.A. 98(23), 13402-13407 (2001).
- 2. Sheffler, D.J. and Conn, P.J. Allosteric potentiators of metabotropic glutamate receptor subtype 1a differentially modulate independent signaling pathways in baby hamster kidney cells. Neuropharmacology 55(4), 419-427 (2008).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM