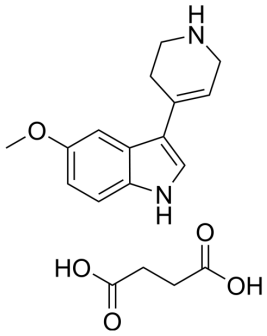
RU 24969 succinate

Cat. No.:	HY-16688A
CAS No.:	107008-28-6
Molecular Formula:	$C_{18}H_{22}N_2O_5$
Molecular Weight:	346.38
Target:	5-HT Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 120 mg/mL (346.44 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.8870 mL	14.4350 mL	28.8700 mL
	5 mM	0.5774 mL	2.8870 mL	5.7740 mL
	10 mM	0.2887 mL	1.4435 mL	2.8870 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

RU 24969 succinate is a 5-HT receptor agonist with K_i values of 0.38 and 2.5 nM for 5-HT_{1B} and 5-HT_{1A}, respectively. RU 24969 decreases fluid consumption and increases forward locomotion. RU 24969 succinate can be used for the research of neurological disease[1][2][3][4].

IC_{50} & Target

Ki: 0.38 nM (5-HT1B), 2.5 nM (5-HT1A)[3]

In Vitro

RU 24969 succinate (30 nM-1 μM) dose-dependently inhibits K^+ evoked efflux of tritium and shows a pD_2 value of 7.45 for the maximum effect at 1 μM[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

RU 24969 succinate (1 and 3 mg/kg; s.c., once) potentiates addictive agent-induced effects[2].

RU 24969 succinate (0.03-3.0 mg/kg; s.c., once) dose-dependently decreases water consumption in water deprived rats[4].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Male Wistar rats with cocaine injection[2]
Dosage:	1 and 3 mg/kg
Administration:	Subcutaneous injection; 1 and 3 mg/kg, once
Result:	Increased cocaine-induced elevation of nucleus accumbens (NAcc) dopamine DA levels and reduction of ventral tegmental area (VTA) GABA levels.

CUSTOMER VALIDATION

- Behav Brain Funct. 2021 May 18;17(1):4.

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REFERENCES

[1]. Middlemiss DN. The putative 5-HT1 receptor agonist, RU 24969, inhibits the efflux of 5-hydroxytryptamine from rat frontal cortex slices by stimulation of the 5-HT autoreceptor. J Pharm Pharmacol. 1985 Jun;37(6):434-7.

[2]. Parsons LH, et al. RU 24969, a 5-HT1B/1A receptor agonist, potentiates cocaine-induced increases in nucleus accumbens dopamine. Synapse. 1999 May;32(2):132-5.

[3]. Peroutka SJ. Pharmacological differentiation and characterization of 5-HT1A, 5-HT1B, and 5-HT1C binding sites in rat frontal cortex. J Neurochem. 1986 Aug;47(2):529-40.

[4]. Aronsen D, et al. RU 24969-produced adipsia and hyperlocomotion: differential role of 5HT 1A and 5HT 1B receptor mechanisms. Pharmacol Biochem Behav. 2014 Sep;124:1-4.

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