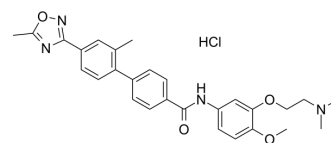


SB-216641A

Cat. No.:	HY-103149
CAS No.:	193611-67-5
Molecular Formula:	C ₂₈ H ₃₁ ClN ₄ O ₄
Molecular Weight:	523.02
Target:	5-HT Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	-20°C, sealed storage, away from moisture
	* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

H₂O : 26.15 mg/mL (50.00 mM; Need ultrasonic and warming)

	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		1.9120 mL	9.5599 mL	19.1197 mL
	5 mM		0.3824 mL	1.9120 mL	3.8239 mL
	10 mM		0.1912 mL	0.9560 mL	1.9120 mL

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

BIOLOGICAL ACTIVITY

Description

SB-216641A (SB-216641 hydrochloride) is a selective antagonist of 5-HT_{1B/D} receptor. SB-216641A shows high affinity and selectivity for h5-HT_{1B} receptors over h5-HT_{1D} receptors. SB-216641A inhibits the function of SKF-99101H^{[1][2]}.

IC₅₀ & Target

5-HT_{1B} Receptor

5-HT_{1D} Receptor

In Vivo

SB-216641A (0.6-20 mg/kg; i.p.; single dose) hinders the SKF-99101H induced hypothermia with dose-dependent manner in guinea pigs^[1].

SB-216641A (559 nmol/kg; i.v.; single dose) improves the gastric relaxation observed after injection of 800 nmol/kg Sumatriptan (HY-B0121B) in dogs when combined with 5-HT_{1B/D} receptor antagonist GR-127935^[2].

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

Animal Model:	Guinea pigs ^[1] .
Dosage:	0.6, 2.0, 6.0 and 20.0 mg/kg.
Administration:	Intraperitoneal injection; single dose.

Result:	Significantly blocked the effects of SKF-99101H.
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Animal Model:	Dogs ^[2] .
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Dosage:	559 nmol/kg.
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Administration:	Intravenous injection; single dose.
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Result:	Improved the gastric relaxation.
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REFERENCES

[1]. Hagan JJ, et al. Stimulation of 5-HT_{1B} receptors causes hypothermia in the guinea pig. *Eur J Pharmacol.* 1997 Jul 23;331(2-3):169-74.

[2]. De Ponti F, et al. Role of 5-HT_{1B/D} receptors in canine gastric accommodation: effect of sumatriptan and 5-HT_{1B/D} receptor antagonists. *Am J Physiol Gastrointest Liver Physiol.* 2003 Jul;285(1):G96-104.

Caution: Product has not been fully validated for medical applications. For research use only.

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