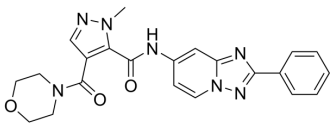
Gemlapodect

Cat. No.:	HY-152838
CAS No.:	1380329-87-2
Molecular Formula:	$C_{22}H_{21}N_7O_3$
Molecular Weight:	431.45
Target:	Phosphodiesterase (PDE)
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Gemlapodect (RO554965) is an inhibitor of phosphodiesterase 10A (PDE10A). Gemlapodect can be used for researching schizophrenia[1].
IC_{50} & Target	PDE10A

In Vivo

Gemlapodect (5-15 mg; p.o.; once daily for 6 weeks) significantly improves the work and life social functions of Childhood-Onset Fluency Disorder (COFD) patients and shows biosafety[2].

Gemlapodect (10 mg/kg; p.o.; single dose) shows nothing change in glucose tolerance of 9 weeks male SD rats[2].

Gemlapodect (0.3 mg/kg; p.o.; once daily for 8 days) induces a slight glucose tolerance improvement, no changes in fasting blood glucose, and decreases of fasting insulin in 10 weeks male SD rats[2].

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

Animal Model:	Adult male patients with COFD (18-50 years old)[2].
Dosage:	5-15 mg.
Administration:	Oral gavage; once daily for 6 weeks.
Result:	Improved the Stuttering, work, social life, family life and home responsibilities of COFD patients and showed biosafety.

Animal Model:	9 weeks or 10 weeks male SD rats[2].
Dosage:	0.3 mg/kg or 10 mg/kg.
Administration:	Oral gavage; once daily for 1 or 8 days.
Result:	Showed insignificantly change of glucose tolerance in healthy rats.

REFERENCES

[1]. Zagorska A, et al. Phosphodiesterase 10 Inhibitors - Novel Perspectives for Psychiatric and Neurodegenerative Drug Discovery. Curr Med Chem. 2018;25(29):3455-3481.

[2]. GARIBALDI, et al. METHODS FOR THE TREATMENT OF CHILDHOOD-ONSET FLUENCY DISORDER. World Intellectual Property Organization. WO2022162193

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