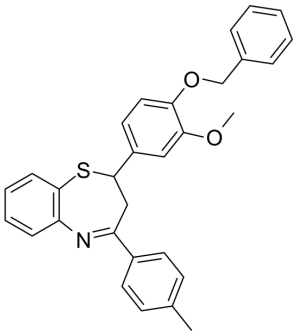
α-Glucosidase-IN-17

Cat. No.:	HY-151141
CAS No.:	2820424-84-6
Molecular Formula:	$C_{30}H_{27}NO_2S$
Molecular Weight:	465.61
Target:	Glucosidase
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	α-Glucosidase-IN-17 (Compound 12B) is a potent, orally active α-glucosidase inhibitor with an IC_{50} of 3.79 μM. α-Glucosidase-IN-17 shows antidiabetic activity[1].
IC_{50} & Target	IC_{50}: 3.79 μM (α-glucosidase)[1]
In Vivo	α-Glucosidase-IN-17 (Compound 12B) (10 and 20 mg/kg; p.o.; b.w. for 4 weeks) shows antidiabetic activity in Streptozocin (HY-13753)-induced diabetic rats[1]. α-Glucosidase-IN-17 (10 and 20 mg/kg; p.o.; once) significantly decreases the serum glucose level after the administration of glucose (3 g/kg, oral) in rats[1]. α-Glucosidase-IN-17 (2000mg/kg; p.o.; b.w. for 2 weeks) demonstrates no mortality in mice[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Male Wistar albino rats (170–200 g), Streptozotocin-induced diabetes model[1]
Dosage:	10 and 20 mg/kg
Administration:	Oral administration, b.w. for 4 weeks
Result:	Decreased the level of blood glucose, reversed Streptozocin-induced body weight loss. Showed antihyperlipidemic effects on Streptozotocin-induced diabetes, reduced to a significant level of serum biomarkers.

REFERENCES

[1]. Mehmood R, et al. Synthesis of Novel 2, 3-Dihydro-1, 5-Benzothiazepines as α-Glucosidase Inhibitors: In Vitro, In Vivo, Kinetic, SAR, Molecular Docking, and QSAR Studies. ACS Omega, 2022.

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

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA