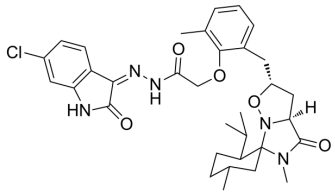
α-Amylase/α-Glucosidase-IN-10

Cat. No.:	HY-162373
Molecular Formula:	$C_{33}H_{40}ClN_5O_5$
Molecular Weight:	622.15
Target:	Amylases; Glucosidase; P-glycoprotein
Pathway:	Metabolic Enzyme/Protease; Membrane Transporter/Ion Channel
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	α-Amylase/α-Glucosidase-IN-10 (compound 5d) is an α-amylase and α-glucosidase inhibitor (IC_{50}: 30.39 μM and 65.1 μM) with potential diabetes inhibitory effects. α-Amylase/α-Glucosidase-IN-10 exhibits high gastrointestinal (GI) absorption in ADMET (Absorption, Distribution, Metabolism, Excretion and Toxicity) prediction. While α-Amylase/α-Glucosidase-IN-10 acts as a substrate for P-gp and does not cross the blood-brain barrier (BBB), there may be a risk of central nervous system side effects[1].
IC_{50} & Target	IC50: 30.39 μM (α-Amylase); 65.1 μM (α-Glucosidase)[1]

REFERENCES

[1]. Ghannay S, et al. Identification of dual-target isoxazolidine-isatin hybrids with antidiabetic potential: Design, synthesis, in vitro and multiscale molecular modeling approaches. Heliyon. 2024 Feb 11;10(4):e25911.

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