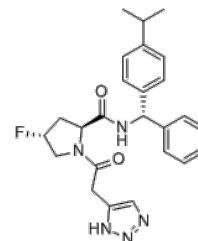


Product Name : MZ-101
Cat. No. : PC-21680
CAS No. : 2839908-40-4
Molecular Formula : C₂₅H₂₈FN₅O₂
Molecular Weight : 449.53
Target : Glycogen Synthase
Solubility : 10 mM in DMSO



CAS: 2839908-40-4

Biological Activity

MZ-101 is a potent, selective inhibitor of **glycogen synthase 1 (GYS1)** with IC₅₀ of 41 nM (human GYS1), with no inhibition against GYS2.

MZ-101 shows similar potency and selectivity of MZ-101 for the mouse isoform of GYS1.

MZ-101 potently and selectively inhibits GYS1 by a noncompetitive mechanism.

MZ-101 reduces glycogen abundance in a dose-dependent manner in fibroblasts from healthy controls and patients with Pompe disease with a mean EC₅₀ of 500 nM.

MZ-101 inhibits glycogen synthesis across species and cell types expressing GYS1, independent of defects in glycogen catabolism.

MZ-101 inhibits GYS1 but not GYS2 de novo glycogen synthesis in WT and Pompe mice.

References

Ullman JC, et al. *Sci Transl Med*. 2024 Jan 17;16(730):eadf1691.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

E-mail: tech@probechem.com