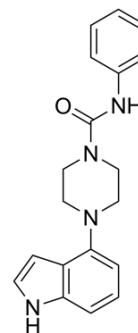


iGOT1-01

Cat. No.:	HY-124825		
CAS No.:	882256-55-5		
Molecular Formula:	C ₁₉ H ₂₀ N ₄ O		
Molecular Weight:	320.39		
Target:	Others		
Pathway:	Others		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



BIOLOGICAL ACTIVITY

Description	iGOT1-01 is a potent aspartate aminotransferase 1 (glutamate oxaloacetate transaminase 1; GOT1) inhibitor. iGOT1-01 has IC ₅₀ s of 85 μM and 11.3 μM in MDH coupled GOT1 enzymatic assay and GOT1/GLOX/HRP assay, respectively. iGOT1-01 has anti-cancer activity ^{[1][2]} .	
IC₅₀ & Target	IC ₅₀ : 85 μM (MDH coupled GOT1 enzymatic assay) and 11.3 μM (GOT1/GLOX/HRP assay) ^[1]	
In Vitro	iGOT1-01 has an IC ₅₀ of 84.6 μM in the GOT1/MDH1 assay. No inhibitory activity is observed for iGOT1-01 against MDH1 alone at 100 μM ^[2] . iGOT1-01 (3.125-200 μM; for 3 h) reveals little to no toxicity using two readouts of cell viability in PaTu8902 pancreatic and DLD1 colon cancer cells ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
In Vivo	iGOT1-01 (compound 1a; 20 mg/kg; oral) has reasonable bioavailability and exposure properties (t _{1/2} =0.7 hours, C _{max} =4133 ng/mL, AUC _(0-24 hours) =11734 hour•ng/mL) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Animal Model:	Female CD1 mice with 9 weeks old ^[1]
	Dosage:	20 mg/kg (Pharmacokinetic Analysis)
	Administration:	Oral
	Result:	Has reasonable bioavailability and exposure properties (t _{1/2} =0.7 hours, C _{max} =4133 ng/mL, AUC _(0-24 hours) =11734 hour•ng/mL).

REFERENCES

[1]. Justin Anglin, et al. Discovery and optimization of aspartate aminotransferase 1 inhibitors to target redox balance in pancreatic ductal adenocarcinoma. *Bioorg Med Chem Lett*. 2018 Sep 1;28(16):2675-2678.

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

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