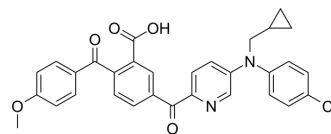


TK05

Cat. No.:	HY-117143		
CAS No.:	1245734-61-5		
Molecular Formula:	C ₃₁ H ₂₅ ClN ₂ O ₅		
Molecular Weight:	540.99		
Target:	Gutathione S-transferase		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 100 mg/mL (184.85 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
	Concentration				
	1 mM		1.8485 mL	9.2423 mL	18.4846 mL
	5 mM		0.3697 mL	1.8485 mL	3.6969 mL
	10 mM		0.1848 mL	0.9242 mL	1.8485 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description	TK05 is a potent and selective inhibitor of leukotriene C ₄ synthase (LTC ₄ S) with an IC ₅₀ of 95 nM ^[1] .	
IC ₅₀ & Target	IC ₅₀ : 95 nM (Leukotriene C ₄ synthase) ^[1]	
In Vitro	TK05 reduces LTC ₄ production in a dose-dependent manner with an IC ₅₀ value of 318 ± 60 nM in MM6 Cells ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
In Vivo	TK05 (0.12-6 mg/kg; given i.p.; only once) significantly reduces LTE ₄ levels ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Animal Model:	Zymosan A induced peritonitis mouse model ^[1]
	Dosage:	0.12 mg/kg; 6 mg/kg

Administration:	Given i.p.; only once
Result:	0.12 mg/kg of TK05 significantly reduced LTE ₄ levels, whereas 6 mg/kg body weight of the compound resulted in almost complete inhibition compared with mice treated with only Zymosan A.

REFERENCES

[1]. Kleinschmidt TK, et al. Tandem Benzophenone Amino Pyridines, Potent and Selective Inhibitors of Human Leukotriene C4 Synthase. J Pharmacol Exp Ther. 2015 Oct;355(1):108-16.

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

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