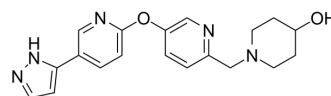


LTA4H-IN-4

Cat. No.:	HY-161349
Molecular Formula:	C ₁₉ H ₂₁ N ₅ O ₂
Molecular Weight:	351.4
Target:	Aminopeptidase
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	LTA4H-IN-4 (compound 3) is an orally active LTA4H inhibitor. The IC ₅₀ value of LTA4H-IN-4 for hERG is 156 μM. LTA4H-IN-4 can be used in inflammation related studies ^[1] .								
IC₅₀ & Target	LTA4H	hERG	156 μM (IC ₅₀)						
In Vitro	LTA4H-IN-4 (compound 3) (0-10 μM, 4 h) completely inhibits LTB ₄ release in primary peripheral blood mononuclear cells (PBMCs) following calcium ionophore stimulation ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
In Vivo	LTA4H-IN-4 (compound 3) (0-10 mg/kg 2 times daily 10 hours apart for 7 days, i.v. or p.o.) shows obvious oral activity in mouse arthritis models, rats, and dogs, and the animal body weight do not change significantly. No obvious adverse results were found in toxicological studies ^[1] . Pharmacokinetic Analysis in mice rats and dogs ^[1]								
	Animal model	Route	Dose (mg/kg)	CL (mL/min kg)	V _{ss} (L/kg)	MRT (h)	AUC _{p.o. d.n.} (nM·h)	C _{max d.n.} (nM)	BAV (%)
	mice	i.v.	1	13	7.2	8.9	/	/	/
	mice	p.o.	10	/	/	/	1476	307	42
	rats	i.v.	1	21	6.3	5.0	/	/	/
	rats	p.o.	3	/	/	/	2200	175	97
	rats	p.o.	30	/	/	/	1773	198	78
	rats	p.o.	300	/	/	/	1741	87	77

dogs	i.v.	0.1	6.6	13	20	/	/	/
dogs	p.o.	0.1	/	/	/	6020	610	86
dogs	p.o.	1	/	/	/	6655	859	95
dogs	p.o.	10	/	/	/	7113	1157	102

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Thoma G, et al. Structure-Guided Elaboration of a Fragment-Like Hit into an Orally Efficacious Leukotriene A4 Hydrolase Inhibitor. J Med Chem. 2024 Mar 28;67(6):5093-5108.

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

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