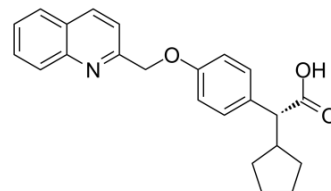


Veliflapon

Cat. No.:	HY-14165		
CAS No.:	128253-31-6		
Molecular Formula:	C ₂₃ H ₂₃ NO ₃		
Molecular Weight:	361.43		
Target:	FLAP; Leukotriene Receptor		
Pathway:	Immunology/Inflammation; GPCR/G Protein		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



BIOLOGICAL ACTIVITY

Description	Veliflapon (BAY X 1005; DG-031) is an orally active and selective 5-lipoxygenase activating protein (FLAP) inhibitor ^[1] . Veliflapon inhibits the synthesis of the leukotrienes B ₄ and C ₄ ^[2] .	
IC₅₀ & Target	LTB ₄	LTC ₄
In Vitro	Veliflapon (BAY X 1005; DG-031) effectively inhibits the synthesis of LTB ₄ in A23187-stimulated leukocytes from rats, mice and humans (IC ₅₀ s of 0.026, 0.039 and 0.22 μM, respectively) as well as the formation of LTC ₄ (IC ₅₀ of 0.021 μM) in mouse peritoneal macrophages stimulated with opsonized zymosan ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
In Vivo	Veliflapon (BAY X 1005; DG-031; diet; 18.8 mg/kg/day for 16 weeks) inhibits atherogenesis ^[4] . Veliflapon after topical (18 μg/ear) and oral (48.7 mg/kg) administration has antiedematous effects in the arachidonic acid-induced mouse ear inflammation test ^[4] . Veliflapon is potent (11.8 and 6.7 mg/kg p.o. at 1 and 5 hours, respectively) and has a long duration of action (ED ₄₀ of 16 hours, 70 mg/kg p.o.) in the rat whole blood ex vivo leukotriene B ₄ inhibition assay ^[4] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Animal Model:	Female apoE/LDLR-DKO mouse model ^[4]
	Dosage:	18.8 mg/kg
	Administration:	Diet; per day during 16 weeks
	Result:	Inhibited atherogenesis.

REFERENCES

[1]. Müller-Peddinghaus R, et al. BAY X1005, a new inhibitor of leukotriene synthesis: in vivo inflammation pharmacology and pharmacokinetics. J Pharmacol Exp Ther. 1993 Oct;267(1):51-7.

[2]. Fruchtmann R, et al. In vitro pharmacology of BAY X1005, a new inhibitor of leukotriene synthesis. Agents Actions. 1993 Mar;38(3-4):188-95.

[3]. Jawień J, et al. BAY x 1005 attenuates atherosclerosis in apoE/LDLR - double knockout mice. J Physiol Pharmacol. 2007 Sep;58(3):583-8.

[4]. Hatzelmann A, et al. Mode of action of the leukotriene synthesis (FLAP) inhibitor BAY X 1005: implications for biological regulation of 5-lipoxygenase. Agents Actions. 1994 Nov;43(1-2):64-8.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA