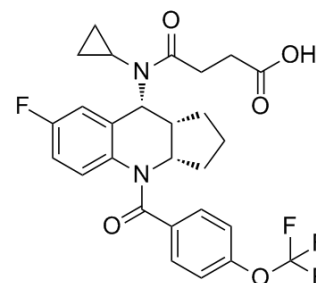


MK-8318

Cat. No.:	HY-112604
CAS No.:	1416581-40-2
Molecular Formula:	C ₂₇ H ₂₆ F ₄ N ₂ O ₅
Molecular Weight:	534.5
Target:	Prostaglandin Receptor
Pathway:	GPCR/G Protein
Storage:	Please store the product under the recommended conditions in the COA.



BIOLOGICAL ACTIVITY

Description	MK-8318 is a potent and selective CRTh2 receptor antagonist with a K _i of 5.0 nM.			
IC₅₀ & Target	CRTH2/DP2 Receptor 5.0 nM (K _i)	β-arrestin 3.5 nM (IC ₅₀)	cAMP 8.0 nM (IC ₅₀)	CYP3A4 50 μM (IC ₅₀)
	CYP2C9 50 μM (IC ₅₀)	CYP2D6 50 μM (IC ₅₀)		
In Vitro	MK-8318 also inhibits β-arrestin, cAMP, CYP3A4, CYP2C9, and CYP2D6 with IC ₅₀ s of 3.5±2.1 nM, 8.0±6.8 nM, 50 μM, 50 μM and 50 μM ^[1] .			
In Vivo	In a sheep model, MK-8318 blocks late airway response (LAR) and airway hyperresponsiveness (AHR) after i.v. infusion at 1 mg/kg. MK-8318 shows 76% LAR efficacy and 114% AHR efficacy. MK-8318 also displays good efficacy on BAL cells/pulmonary function from ovalbumin sensitized and challenged Brown Norway rats at 3, 10, and 30 mg/kg oral dosing ^[1] .			

REFERENCES

[1]. Huang X, et al. Discovery of MK-8318, a Potent and Selective CRTh2 Receptor Antagonist for the Treatment of Asthma. ACS Med Chem Lett. 2018 Jun 23;9(7):679-684.

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

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