PRODUCT INFORMATION



MF766

Item No. 36076

CAS Registry No.:	1050656-06-8	
Formal Name:	4-[1-[[[1-[[4-(trifluoromethyl)	
	phenyl]methyl]-1H-indol-7-yl]	
	carbonyl]amino]cyclopropyl]-	F
	benzoic acid	F
MF:	C ₂₇ H ₂₁ F ₃ N ₂ O ₃	HO F
FW:	478.5	
Purity:	≥95%	
UV/Vis.:	λ _{max} : 228 nm	
Supplied as:	A solid	
Storage:	-20°C	
Stability:	≥4 years	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

Laboratory Procedures

MF766 is supplied as a solid. A stock solution may be made by dissolving the MF766 in the solvent of choice, which should be purged with an inert gas. MF766 is soluble in DMSO.

Description

MF766 is an antagonist of the prostaglandin E_2 (PGE₂) receptor subtype EP_4 (K_i = 0.23 nM).¹ It is selective for EP₄ over the PGD₂ receptor subtype DP_1 ($K_1 = 1,648$ nM) as well as the EP₁, EP₂, EP₃, and CRTH₂/DP₂ receptors, the PGI₂ receptor (IP), thromboxane receptor (TP), and PGF receptor (FP; K_is = >6,000 nM for all). It inhibits cAMP accumulation induced by PGE₂ (Item No. 14010) in HEK293 cells (IC₅₀ = 1.3 nM). MF766 (312.5 and 1,250 nM) reverses PGE₂-induced decreases in IFN-γ production in IL-2-stimulated primary human natural killer cells.² It reduces paw edema in a rat model of adjuvant-induced arthritis in a dose-dependent manner.¹ MF766 (30 mg/kg) inhibits tumor growth in a CT26 murine colon cancer model.²

References

1. Colucci, J., Boyd, M., Berthelette, C., et al. Discovery of 4-{1-[({1-[4-(trifluoromethyl)benzyl]-1H-indol-7yl]carbonyl]amino]cyclopropyl]benzoic acid (MF-766), a highly potent and selective EP₄ antagonist for treating inflammatory pain. Bioorg. Med. Chem. Lett. 20(12), 3760-3763 (2010).

2. Wang, Y., Cui, L., Georgiev, P., et al. Combination of EP4 antagonist MF-766 and anti-PD-1 promotes anti-tumor efficacy by modulating both lymphocytes and myeloid cells. Oncoimmunology 10(1), 1896643 (2021).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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