PRODUCT INFORMATION



RP 001 (hydrochloride)

Item No. 16636

CAS Registry No.: Formal Name:	N-[4-[5-[3-cyano-4-(1-methylethoxy) phenyl]-1,2,4-oxadiazol-3-yl]-2,3- dihydro-1H-inden-1-yl]-β-alanine, monohydrochloride		
MF:	$C_{24}H_{24}N_4O_4 \bullet HCI$	0	V N OH
FW:	468.9		• HCI H
Purity:	≥98%	\wedge	
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

RP 001 (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the RP 001 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. RP 001 (hydrochloride) is soluble in the organic solvent DMSO at a concentration of approximately 100 mM.

Description

RP 001 is a potent sphingosine-1-phosphate receptor 1 (S1P₁) agonist (EC₅₀ = 9 pM).¹ It is competitive with W146 (Item No. 10009109), a selective S1P₁ antagonist, and induces internalization and polyubiquitination of S1P1 in a dose-dependent manner. RP 001 induces dose-dependent lymphopenia in mice (EC₅₀ = 0.03 mg/kg). It reduces S1P₁-EGFP expression ex vivo on lymphocytes in the isolated lymph node of Edg1^{eGFP/eGFP} mice but has no effect in vivo. RP 001 also completely inhibits M. stadtmanae (MSS) rechallengeinduced enlargement of B cell-rich tertiary lymphoid tissues (TLTs) and reduces neutrophil accumulation in the airways of a mouse model of experimental hypersensitivity pneumonitis.²

References

- 1. Cahalan, S.M., Gonzalez-Cabrera, P.J., Sarkisyan, G., et al. Actions of a picomolar short-acting S1P₁ agonist in S1P₁-eGFP knock-in mice. Nat. Chem. Biol. 7(5), 254-256 (2011).
- 2. Huppé, C.A., Lecours, P.B., Lechasseur, A., et al. A sphingosine-1-phosphate receptor 1 agonist inhibits tertiary lymphoid tissue reactivation and hypersensitivity in the lung. Mucosal. Immunol. 11(1), 112-119 (2018).

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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