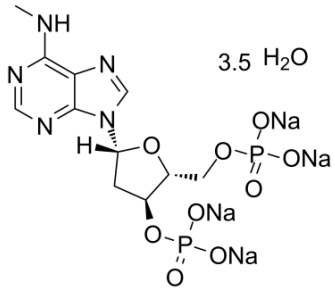
MRS2179 tetrasodium hydrate

Cat. No.:	HY-101308A
Molecular Formula:	$C_{11}H_{13}N_5O_9P_2Na_4 \cdot 3\frac{1}{2}H_2O$
Molecular Weight:	576.21
Target:	P2Y Receptor
Pathway:	GPCR/G Protein
Storage:	Powder -20°C 3 years In solvent -80°C 6 months -20°C 1 month



BIOLOGICAL ACTIVITY

Description

MRS2179 tetrasodium hydrate is a competitive P2Y1 receptor antagonist, with a K_b of 102 nM and a pA_2 of 6.99 for turkey P2Y1 receptor. MRS2179 tetrasodium hydrate is selective for P2Y1 over P2X1 (IC_{50}=1.15 μM), P2X3 (12.9 μM), P2X2, P2X4, P2Y2, P2Y4, and P2Y6 receptors[1][2]. MRS2179 tetrasodium hydrate inhibits platelet aggregation[3].

In Vivo

MRS2179 tetrasodium hydrate (50 mg/kg; i.p.) prolongs the bleeding time[3].

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

Animal Model:	CL57BLr6 mice[3]
Dosage:	50 mg/kg
Administration:	Injection into the jugular vein of mice
Result:	The bleeding time, which reflects in vivo primary haemostasis, was significantly prolonged in MRS2179-treated mice, 30 s after injection of MRS2179.

REFERENCES

[1]. Nandanan E, et al. Synthesis, biological activity, and molecular modeling of ribose-modified deoxyadenosine bisphosphate analogues as P2Y(1) receptor ligands. J Med Chem. 2000;43(5):829-842.

[2]. von Kügelgen I. Pharmacological profiles of cloned mammalian P2Y-receptor subtypes. Pharmacol Ther. 2006;110(3):415-432.

[3]. Baurand A, Raboisson P, Freund M, et al. Inhibition of platelet function by administration of MRS2179, a P2Y1 receptor antagonist. Eur J Pharmacol. 2001;412(3):213-221.

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

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