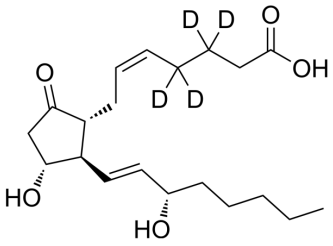
Prostaglandin E2-d_4

Cat. No.:	HY-101952S
CAS No.:	34210-10-1
Molecular Formula:	$C_{20}H_{28}D_4O_5$
Molecular Weight:	356.49
Target:	Prostaglandin Receptor; Endogenous Metabolite
Pathway:	GPCR/G Protein; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Prostaglandin E2-d_4 is the deuterium labeled Prostaglandin E2. Prostaglandin E2 (PGE2) is a hormone-like substance that participate in a wide range of body functions such as the contraction and relaxation of smooth muscle, the dilation and constriction of blood vessels, control of blood pressure, and modulation of inflammation[1][2].
IC_{50} & Target	EP
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.

[2]. Chouaib S, et al. The mechanisms of inhibition of human IL 2 production. II. PGE2 induction of suppressor T lymphocytes. J Immunol. 1984 Apr;132(4):1851-7.

[3]. Fernandez-Repollet E, et al. In vivo effects of prostaglandin E2 and arachidonic acid on phagocytosis of fluorescent methacrylate microbeads by rat peritoneal macrophages. J Histochem Cytochem. 1982 May;30(5):466-70.

[4]. Haylor J, et al. Renal vasodilator activity of prostaglandin E2 in the rat anaesthetized with pentobarbitone. Br J Pharmacol. 1982 May;76(1):131-7.

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