Product Data Sheet

Iloprost-d₄

Cat. No.: HY-A0096S **CAS No.:** 1035094-10-0

Molecular Formula: $C_{22}H_{28}D_4O_4$ Molecular Weight: 364.51

Target: Prostaglandin Receptor; Isotope-Labeled Compounds

Pathway: GPCR/G Protein; Others

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description	Iloprost-d ₄ (Ciloprost-d4) is the deuterium labeled Iloprost. Iloprost (ZK 36374) is a synthetic analogue of prostacyclin PGI2[1][2].
IC ₅₀ & Target	IP
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]. Della Bella S, et al. Novel mode of action of iloprost: in vitro down-regulation of endothelial cell adhesion molecules. Prostaglandins Other Lipid Mediat. 2001 Jun;65(2-3):73-83.

[3]. van der Giessen WJ, et al. The effect of the stable prostacyclin analogue ZK 36374 on experimental coronary thrombosis in the pig. Thromb Res. 1984 Oct 1;36(1):45-51.

[4]. Addonizio VP Jr, et al. Prevention of heparin-induced thrombocytopenia during open heart surgery with iloprost (ZK36374). Surgery. 1987 Nov;102(5):796-807.

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

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