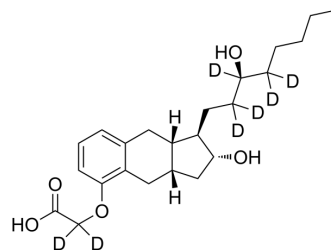


Treprostinil-d₇

Cat. No.:	HY-100441S3
Molecular Formula:	C ₂₃ H ₂₇ D ₇ O ₅
Molecular Weight:	397.56
Target:	Isotope-Labeled Compounds; Prostaglandin Receptor
Pathway:	Others; GPCR/G Protein
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Treprostinil-d₇ (UT-15-d₇) is a deuterated version of Treprostinil (HY-100441). Treprostinil is a highly potent DP1 and EP2 agonist with EC₅₀s of 0.6 nM and 6.2 nM, respectively^{[1][2][3][4][5][6][7]}.

REFERENCES

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.
- [2]. Whittle BJ, et al. Binding and activity of the prostacyclin receptor (IP) agonists, treprostinil and iloprost, at human prostanoid receptors: treprostinil is a potent DP1 and EP2 agonist. *Biochem Pharmacol.* 2012 Jul 1;84(1):68-75.
- [3]. Ferrantino M, et al. Inhaled treprostinil sodium for the treatment of pulmonary arterial hypertension. *Expert Opin Pharmacother.* 2011 Nov;12(16):2583-93.
- [4]. Ghonem N, et al. Treprostinil, a prostacyclin analog, ameliorates ischemia-reperfusion injury in rat orthotopic liver transplantation. *Am J Transplant.* 2011 Nov;11(11):2508-16.
- [5]. Smadja DM, et al. Treprostinil indirectly regulates endothelial colony forming cell angiogenic properties by increasing VEGF-A produced by mesenchymal stem cells. *Thromb Haemost.* 2015 Oct;114(4):735-47.
- [6]. Kazemi Z, et al. Repurposing Treprostinil for Enhancing Hematopoietic Progenitor Cell Transplantation. *Mol Pharmacol.* 2016 Jun;89(6):630-44.
- [7]. Nikam VS, et al. Treprostinil inhibits the recruitment of bone marrow-derived circulating fibrocytes in chronic hypoxic pulmonary hypertension. *Eur Respir J.* 2010 Dec;36(6):1302-14.

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

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