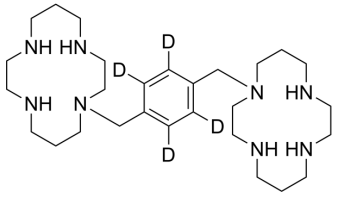
Plerixafor-d_4

Cat. No.:	HY-10046S
CAS No.:	1246819-87-3
Molecular Formula:	$C_{28}H_{50}D_4N_8$
Molecular Weight:	506.81
Target:	CXCR; HIV; Isotope-Labeled Compounds
Pathway:	GPCR/G Protein; Immunology/Inflammation; Anti-infection; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Plerixafor-d_4 is the deuterium labeled Plerixafor. Plerixafor (AMD 3100) is a selective CXCR4 antagonist with an IC50 of 44 nM. Plerixafor, an immunostimulant and a hematopoietic stem cell (HSC) mobilizer, is an allosteric agonist of CXCR7. Plerixafor inhibits HIV-1 and HIV-2 replication with an EC50 of 1-10 nM[1][2][3][4][7].
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

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[3]. Seki JT, et al. Chemical Stability of Plerixafor after Opening of Single-Use Vial. Can J Hosp Pharm. 2017 Jul-Aug;70(4):270-275.

[4]. Schols D, et al. HIV co-receptor inhibitors as novel class of anti-HIV drugs. Antiviral Res. 2006 Sep;71(2-3):216-26.

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

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