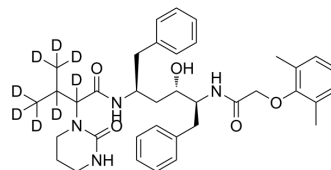


(rel)-Lopinavir-d₈

Cat. No.:	HY-14588S
CAS No.:	1322625-54-6
Molecular Formula:	C ₃₇ H ₄₀ D ₈ N ₄ O ₅
Molecular Weight:	636.85
Target:	Isotope-Labeled Compounds
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	(rel)-Lopinavir-d ₈ ((rel)-ABT-378-d ₈) is the deuterium labeled Lopinavir (HY-14588) ^[1] . Lopinavir (ABT-378) is a highly potent, selective peptidomimetic inhibitor of the HIV-1 protease, with K _i s of 1.3 to 3.6 pM for wild-type and mutant HIV protease. Lopinavir acts by arresting maturation of HIV-1 thereby blocking its infectivity ^{[2][3]} . Lopinavir is also a SARS-CoV 3CL ^{pro} inhibitor with an IC ₅₀ of 14.2 μM ^[4] .
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 Feb;53(2):211-216.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA