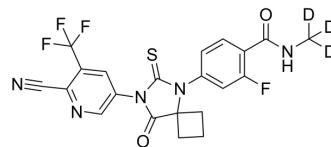


Apalutamide-d₃

Cat. No.:	HY-16060S1
CAS No.:	1638885-61-6
Molecular Formula:	C ₂₁ H ₁₂ D ₃ F ₄ N ₅ O ₂ S
Molecular Weight:	480.45
Target:	Androgen Receptor
Pathway:	Vitamin D Related/Nuclear Receptor
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Apalutamide-d ₃ is the deuterium labeled Apalutamide[1]. Apalutamide (ARN-509) is a potent and competitive androgen receptor (AR) antagonist, binding AR with an IC ₅₀ of 16 nM[2].
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.
- [2]. Clegg NJ, et al. ARN-509: a novel antiandrogen for prostate cancer treatment. *Cancer Res*. 2012 Mar 15;72(6):1494-503.
- [3]. Smith MR, et al. Phase 2 Study of the Safety and Antitumor Activity of Apalutamide (ARN-509), a Potent Androgen Receptor Antagonist, in the High-risk Nonmetastatic Castration-resistant Prostate Cancer Cohort. *Eur Urol*. 2016 May 6. pii: S0302-2838(16)30133

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