MCE MedChemExpress

Navitoclax-d₈

Cat. No.: HY-10087S

CAS No.: 1217620-38-6 Molecular Formula: $C_{47}H_{47}D_8ClF_3N_5O_6S_3$

Molecular Weight: 982.66

Target: Bcl-2 Family
Pathway: Apoptosis

Storage: Powder -20°C 3 years

In solvent -80°C 6 months

-20°C 1 month

BIOLOGICAL ACTIVITY

Navitoclax-d₈ is the deuterium labeled Navitoclax. Navitoclax (ABT-263) is a potent and orally active Bcl-2 family protein inhibitor that binds to multiple anti-apoptotic Bcl-2 family proteins, such as Bcl-xL, Bcl-2 and Bcl-w, with a Ki of less than 1 nM[1].
 In Vitro
 Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as

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].

 $\label{eq:mce} \mbox{MCE has not independently confirmed the accuracy of these methods. They are for reference only.}$

REFERENCES

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.

[2]. Chen J, et al. The Bcl-2/Bcl-X(L)/Bcl-w inhibitor, navitoclax, enhances the activity of chemotherapeutic agents in vitro and in vivo. Mol Cancer Ther. 2011 Dec;10(12):2340-9.

[3]. Lock R1, et al. Initial testing (stage 1) of the BH3 mimetic ABT-263 by the pediatric preclinical testing program. Pediatr Blood Cancer. 2008 Jun;50(6):1181-1189.

[4]. Wong M, et al. Navitoclax (ABT-263) reduces Bcl-x(L)-mediated chemoresistance in ovarian cancer models. Mol Cancer Ther. 2012 Apr;11(4):1026-1035.

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