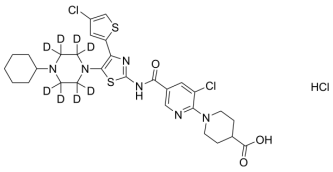
Avatrombopag-d_8 hydrochloride

Cat. No.:	HY-13463BS
Molecular Formula:	$C_{29}H_{27}D_8Cl_3N_6O_3S_2$
Molecular Weight:	694.16
Target:	Thrombopoietin Receptor; Isotope-Labeled Compounds
Pathway:	Immunology/Inflammation; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Avatrombopag-d_8 (hydrochloride) is deuterium labeled Avatrombopag (hydrochloride). Avatrombopag (AKR-501) hydrochloride is an orally active, nonpeptide thrombopoietin (TPO) receptor agonist (EC50=3.3 nM). Avatrombopag hydrochloride mimics the biological activities of TPO. Avatrombopag hydrochloride increases platelet production by activating the intracellular signaling system, and promotes production of platelets and megakaryocytes from hemopoietic precursor cells. Avatrombopag hydrochloride is a substrate of cytochrome P450 (CYP) 2C9 and CYP3A[1][2][3].
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;53(2):211-216.

[2]. Fukushima-Shintani M, et al. AKR-501 (YM477) a novel orally-active thrombopoietin receptor agonist. Eur J Haematol. 2009;82(4):247-254.

[3]. Nomoto M, et al. Pharmacokinetic/pharmacodynamic drug-drug interactions of avatrombopag when coadministered with dual or selective CYP2C9 and CYP3A interacting drugs. Br J Clin Pharmacol. 2018;84(5):952-960.

[4]. Xu H, et al. Avatrombopag for the treatment of thrombocytopenia in patients with chronic liver disease. Expert Rev Clin Pharmacol. 2019 Sep;12(9):859-865.

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