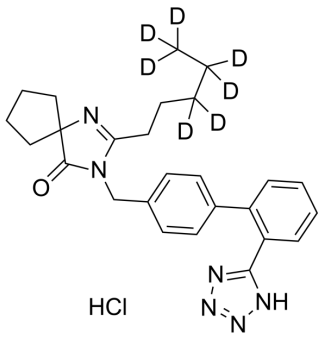
Irbesartan-d_7 hydrochloride

Cat. No.:	HY-B0202AS
Molecular Formula:	$C_{26}H_{24}D_7ClN_6O$
Molecular Weight:	486.06
Target:	Apoptosis; Angiotensin Receptor; Isotope-Labeled Compounds
Pathway:	Apoptosis; GPCR/G Protein; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Irbesartan-d_7 hydrochloride is deuterated labeled Irbesartan hydrochloride (HY-B0202A). Irbesartan (SR-47436) hydrochloride is an orally active Ang II type 1 (AT1) receptor blocker (ARB). Irbesartan hydrochloride can relax the blood vessels, low blood pressure and increase the supply of blood and oxygen to the heart. Irbesartan hydrochloride can be used for the research of high blood pressure, heart failure, and diabetic kidney disease[1].
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]. Irbesartan hydrochloride (20 μM, 3 h) reduces Th22 cells chemotaxis in vitro[2]. Irbesartan hydrochloride (0 μM, 20 μM, 40 μM and 60 μM) suppresses Th22 cells differentiation in vitro[2]. Irbesartan hydrochloride (20 μM) inhibits Th22 cells related proinflammatory response of TECs in vitro[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Irbesartan hydrochloride (oral gavage; 50 mg/kg/d; once daily) reduces Th22 lymphocytosis and serum IL-22 level in Ang II-infused mice[2]. Irbesartan hydrochloride (oral gavage; 50 mg/kg/d; once daily) exerts obvious renoprotective effects[2]. Irbesartan hydrochloride (oral gavage; 50 mg/kg/d; once daily) relieves systemic inflammation and renal fibrosis in hypertension mice induced by Ang II[2]. Irbesartan hydrochloride (20 μM; for 3 h) can attenuate Th22 cells recruitment and IL-22 secretion, which might be through inhibiting chemotaxis in hypertensive renal injury mice[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Yong Zhong, et al. Irbesartan may relieve renal injury by suppressing Th22 cells chemotaxis and infiltration in Ang II-induced hypertension. Int Immunopharmacol

[2]. 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.

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