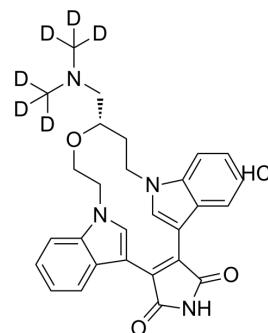


Ruboxistaurin-d₆ hydrochloride

Cat. No.:	HY-10195BS
CAS No.:	1794767-04-6
Molecular Formula:	C ₂₈ H ₂₃ D ₆ ClN ₄ O ₃
Molecular Weight:	511.04
Target:	PKC; Isotope-Labeled Compounds
Pathway:	Epigenetics; TGF-beta/Smad; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Ruboxistaurin-d ₆ (hydrochloride) is the deuterium labeled Ruboxistaurin hydrochloride. Ruboxistaurin (LY333531) hydrochloride is an orally active, selective PKC beta inhibitor (K _i =2 nM). Ruboxistaurin hydrochloride exhibits ATP dependent competitive inhibition of PKC beta I with an IC ₅₀ of 4.7 nM. Ruboxistaurin hydrochloride inhibits PKC beta II with an IC ₅₀ of 5.9 nM[1][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

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- [2]. Jirousek MR, et al. (S)-13-[(dimethylamino)methyl]-10,11,14,15-tetrahydro-4,9:16, 21-dimetheno-1H, 13H-dibenzo[e,k]pyrrolo[3,4-h][1,4,13]oxadiazacyclohexadecene-1,3(2H)-dione (LY333531) and related analogues: isozyme selective inhibitors of protein kinase C beta. *J Med Chem*. 1996;39(14):2664-2671.
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- [4]. Kunt T, et al. The beta-specific protein kinase C inhibitor ruboxistaurin (LY333531) suppresses glucose-induced adhesion of human monocytes to endothelial cells in vitro. *J Diabetes Sci Technol*. 2007 Nov;1(6):929-35.
- [5]. Nonaka A, et al. PKC-beta inhibitor (LY333531) attenuates leukocyte entrapment in retinal microcirculation of diabetic rats. *Invest Ophthalmol Vis Sci*. 2000 Aug;41(9):2702-6.

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