Ramatroban-d_4

Cat. No.: HY-B0745S

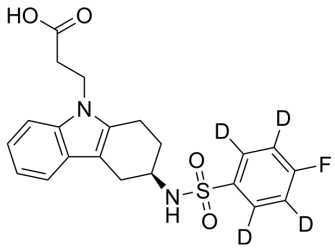
Molecular Formula: $C_{21}H_{17}D_4FN_2O_4S$

Molecular Weight: 420.49

Target: Prostaglandin Receptor; Isotope-Labeled Compounds

Pathway: GPCR/G Protein; Others

Storage: Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Ramatroban-d_4 is deuterium labeled Ramatroban. Ramatroban is a selective thromboxane A2 (TxA2, IC50=14 nM) antagonist, which also antagonizes CRTH2 (IC50=113 nM) by inhibiting PGD2 binding.
IC_{50} & Target	TXA_2/TP
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]. Haba R, et al. Central CRTH2, a second prostaglandin D_2 receptor, mediates emotional impairment in the lipopolysaccharide and tumor-induced sickness behavior model. J Neurosci. 2014 Feb 12;34(7):2514-23.

[3]. Stearns BA, et al. Novel tricyclic antagonists of the prostaglandin D_2 receptor DP2 with efficacy in a murine modelof allergic rhinitis. Bioorg Med Chem Lett. 2009 Aug 15;19(16):4647-51.

[4]. Sugimoto H, et al. An orally bioavailable small molecule antagonist of CRTH2, ramatroban (BAY u3405), inhibits prostaglandin D_2-induced eosinophil migration in vitro. J Pharmacol Exp Ther. 2003 Apr;305(1):347-52.

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