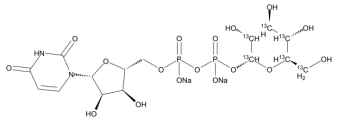
Uridine 5′-diphosphoglucose-$^{13}C_6$ disodium

Cat. No.:	HY-N7032S1
CAS No.:	2483735-04-0
Molecular Formula:	$C_9{}^{13}C_6H_{22}N_2Na_2O_{17}P_2$
Molecular Weight:	616.22
Target:	P2Y Receptor; Endogenous Metabolite
Pathway:	GPCR/G Protein; Metabolic Enzyme/Protease
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



BIOLOGICAL ACTIVITY

Description	Uridine 5′-diphosphoglucose-$^{13}C_6$ (disodium) is the ^{13}C labeled Uridine 5′-diphosphoglucose disodium salt[1]. Uridine 5′-diphosphoglucose disodium salt (UDP-D-Glucose disodium salt) is the precursor of glucose-containing oligosaccharides, polysaccharides, glycoproteins, and glycolipids in animal tissues and in some microorganisms. Uridine-5′-diphosphoglucose is an agonist of the P2Y14 receptor, a neuroimmune system GPCR[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

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

[2]. DietrichKeppler, et al. Uridine-5′-diphosphoglucose. Methods of Enzymatic Analysis (Second English Edition). 1974;4:2225-2228.

[3]. Das A, et al. Human P2Y(14) receptor agonists: truncation of the hexose moiety of uridine-5'-diphosphoglucose and its replacement with alkyl and aryl groups. J Med Chem. 2010 Jan 1453(1):471-80.

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