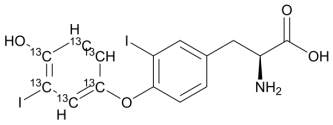
3,3'-Diiodo-L-thyronine-$^{13}C_6$

Cat. No.:	HY-129974S
CAS No.:	1217459-13-6
Molecular Formula:	$C_9{}^{13}C_6H_{13}I_2NO_4$
Molecular Weight:	531.03
Target:	COX; Endogenous Metabolite
Pathway:	Immunology/Inflammation; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	3,3'-Diiodo-L-thyronine-$^{13}C_6$ is the ^{13}C labeled 3,3'-Diiodo-L-thyronine[1]. 3,3'-Diiodo-L-thyronine (3,3'-T2) is an endogenous metabolite of thyroid hormone. 3,3'-Diiodo-L-thyronine significantly enhances COX activity[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 Feb;53(2):211-216.

[2]. Lorenzini L, et al. Assay of Endogenous 3,5-diiodo-L-thyronine (3,5-T2) and 3,3'-diiodo-L-thyronine (3,3'-T2) in Human Serum: A Feasibility Study. Front Endocrinol (Lausanne). 2019 Feb 19;10:88.

[3]. Lanni A, et al. Rapid stimulation in vitro of rat liver cytochrome oxidase activity by 3,5-diiodo-L-thyronine and by 3,3'-diiodo-L-thyronine. Mol Cell Endocrinol. 1994 Feb99(1):89-94.

[4]. Chen X, et al. Simultaneous quantification of T4, T3, rT3, 3,5-T2 and 3,3'-T2 in larval zebrafish (Danio rerio) as a model to study exposure to polychlorinated biphenyls. Biomed Chromatogr. 2018 Jun32(6):e4185.

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