## **Product** Data Sheet

## 4,6-Dioxoheptanoic acid-13C<sub>5</sub>

Cat. No.: HY-W010184S CAS No.: 881835-86-5 Molecular Formula:  $C_2^{13}C_5H_{10}O_4$  Molecular Weight: 163.12

Target: Endogenous Metabolite

Pathway: Metabolic Enzyme/Protease

Storage: Powder -20°C 3 years

In solvent -80°C 6 months -20°C 1 month

$$H_3^{13}C$$
 $H_2$ 
 $H_2$ 
 $H_3$ 
 $H_2$ 
 $H_3$ 
 $H_3$ 
 $H_3$ 
 $H_3$ 
 $H_3$ 
 $H_3$ 
 $H_3$ 
 $H_3$ 

## **BIOLOGICAL ACTIVITY**

Description	4,6-Dioxoheptanoic acid- $^{13}$ C <sub>5</sub> is the $^{13}$ C labeled 4,6-Dioxoheptanoic acid[1]. 4,6-Dioxoheptanoic acid is a potent inhibitor of heme biosynthesis[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 <sup>[1]</sup> .  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]. Ebert PS, et al. Succinylacetone, a potent inhibitor of heme biosynthesis: effect on cell growth, heme contentand delta-aminolevulinic acid dehydratase activity of malignant murine erythroleukemia cells. Biochem Biophys Res Commun. 1979 Jun 27;88(4):1382-90.

Caution: Product has not been fully validated for medical applications. For research use only.

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