Product Data Sheet

D-Ribose-1,2-¹³C₂

Cat. No.: HY-W018772S16

CAS No.: 209909-88-6 $\label{eq:cas-noise} \mbox{Molecular Formula:} \qquad \mbox{C_3^{13}C}_2\mbox{H_{10}O}_5$

Molecular Weight: 152.12

Target: Isotope-Labeled Compounds

Pathway: Others

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

Analysis.

OH H H 13 C OH OH

BIOLOGICAL ACTIVITY

Description	D-Ribose-1,2- 13 C ₂ is the 13 C labled D-Ribose(mixture of isomers) (HY-W018772) $^{[1]}$. D-Ribose(mixture of isomers) is an energy enhancer, and acts as a sugar moiety of ATP, and widely used as a metabolic therapy supplement for chronic fatigue syndrome or cardiac energy metabolism. D-Ribose(mixture of isomers) is active in protein glycation, induces NF- κ B inflammation in a RAGE-dependent manner ^[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.

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

Inhibitors